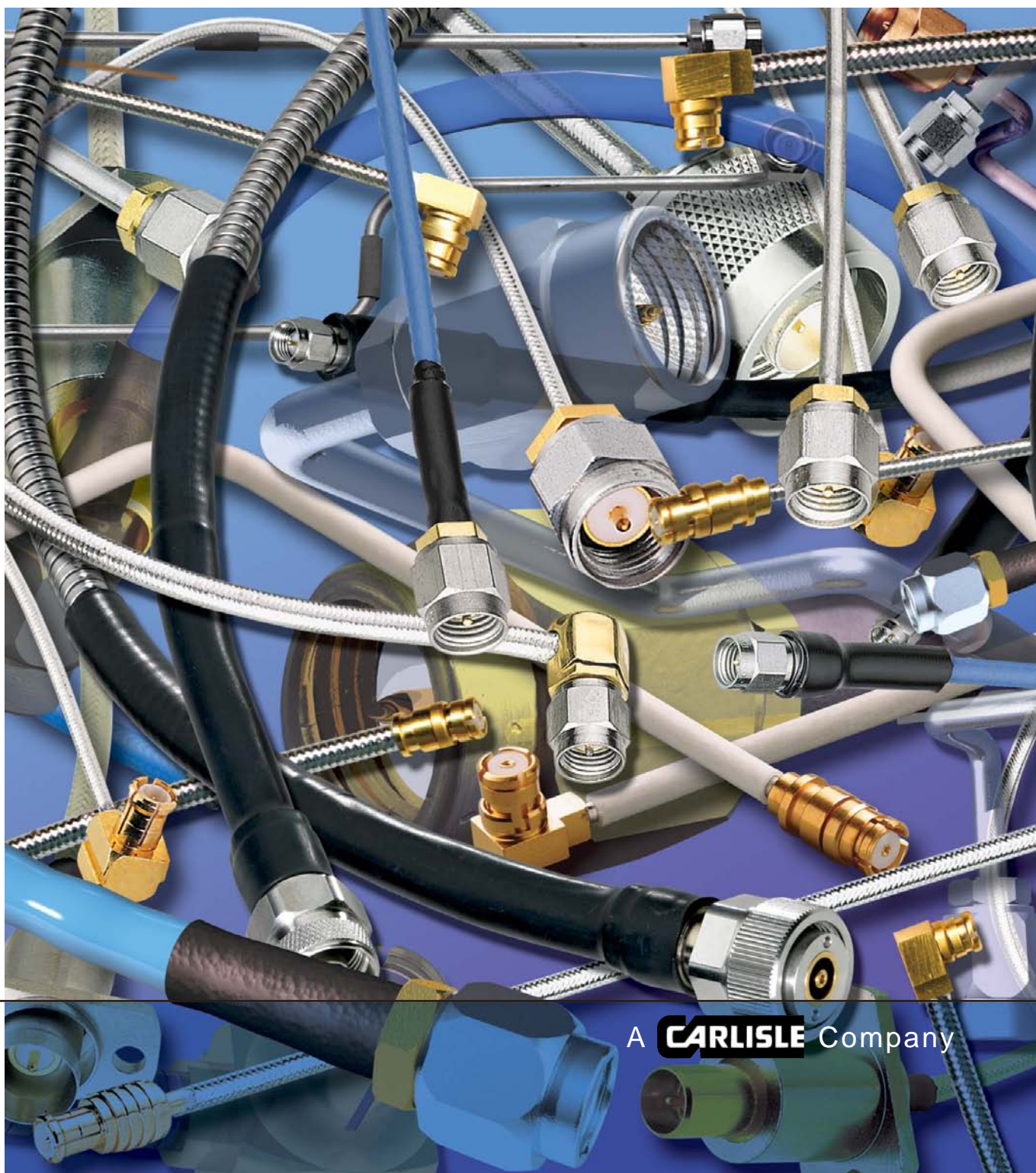


Standard RF/Microwave Cable Assemblies

Tensolite



A **CARLISLE** Company

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Cable

Flexible (listed by diameter)

Assembly Cable Code

140 (RG 178)	133
187 (RG 316)	134
195 (Improved Double Braid RG 316)	135
511 (Super Flex)	136
115 (RG 58)	137
132 (RG 142)	138
190 (RG 400)	139
301 (Low Loss)	140
504 (High Performance)	141
510 (Super Flex)	142
174 (RG 223)	143
521 (Super Flex 75 Ohm)	144
163 (RG 214)	145
404 (SF 214)	146

Cable

Semi-Rigid/Semi-Flex (listed by diameter)

Assembly Cable Code

600 (Semi-Flex .086)	148
600-40 (Semi-Flex .086)	149
617 (Semi-Flex II .086)	150
678 (RG 405)	151
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Profile

Tensolite RF/Microwave Interconnects

Tensolite provides design support and innovative techniques with hands-on engineering to solve interconnect and cabling issues. We have located our RF/Microwave manufacturing, engineering, and sales offices around the world to provide fast, innovative solutions to our customers. We are committed to bringing technology and quality of high-performance cable and interconnects to today's competitive and evolving communication markets.

Tensolite's design staff provides valuable recommendations for both product improvements and innovative solutions to help meet customers electrical and mechanical specifications. We have satisfied a myriad of requirements for RF/Microwave interconnects from low VSWR phase-matched interconnects, to high volume bulk cable production orders. Our extensive engineering group continues to improve their reputation for meeting a wide range of product specifications in addition to keeping pace with technological advances. The products and services we provide are as diverse as the industry we serve.

Tensolite manufactures standard and custom specified RF/Microwave cable assemblies and connectors that operate from DC to 65 GHz. We manufacture and design semi-rigid, hand formable (Semi-Flex® series) and flexible cable assemblies. Tensolite benefits from a wide and diverse customer base in the telecommunications market. We also sell our RF/Microwave assemblies through worldwide distribution channels setting us apart from our competitors by offering "off the shelf" product that is deliverable within 24 hours from order placement.

Tensolite utilize automatic cable cutting and stripping machines that are designed by our engineers to meet the stringent manufacturing requirements that are imposed upon us by customers who expect precise phase matched cable assemblies. We also utilize automatic marking machines for the labels that are used on our cables.

Tensolite invites you to visit our RF/Microwave cable assembly and connector facilities in Long Beach, California and Vancouver, Washington. We are sure that when the opportunity arises you will find Tensolite RF/Microwave will be accommodating to each and every challenge that one can give us.

With years of experience in building Complex Assemblies, Tensolite is continually improving our processes and productivity, enabling our customers to stay competitive in today's fast paced business world.

Combination D-Sub:

Offers a variety of applications for combining signal, high current, high voltage, and coaxial contacts.

- Variety of configurations
- Male and female
- Five different shell sizes
- Solder cup or crimp
- Yellow Zinc Chromate or Tin Plate
- Insulators are Glass Filled PBT UL94V-0
- Temperature range -55° to $+105^{\circ}$ C

Subminiature D-Subs:

Are used in industrial control systems, computers and telecommunications equipment of all kinds.

- Exceeds EMI/RFI FCC regulation 20780 Class A and B.
- Performs effectively with wide range of foil or braided shields.
- Comes in standard sizes, 9, 15, 25, 37, and 50 positions.
- Socket or Plug connectors come in Yellow Zinc or Tin-Plating.

Subminiature Cylindrical Connectors MIL-DTL-38999

Assemblies offer the highest performance capabilities for both general duty and severe environment applications.

- EMI Shielding
- Vibration / Shock
- Quick Coupling
- Corrosion Resistance

Tensolite has a wide variety...

of other complex assemblies.

- SCSI cable assemblies
- Circular Din assemblies
- Aerospace cable assemblies:
 - ARINC Interconnects
 - Ethernet
 - IEEE 1394
 - Copper Fibre Channel Aerospace assemblies.
 - USB



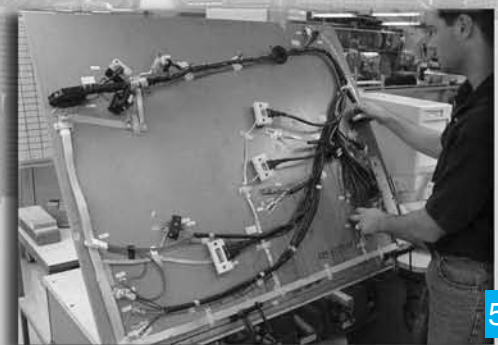
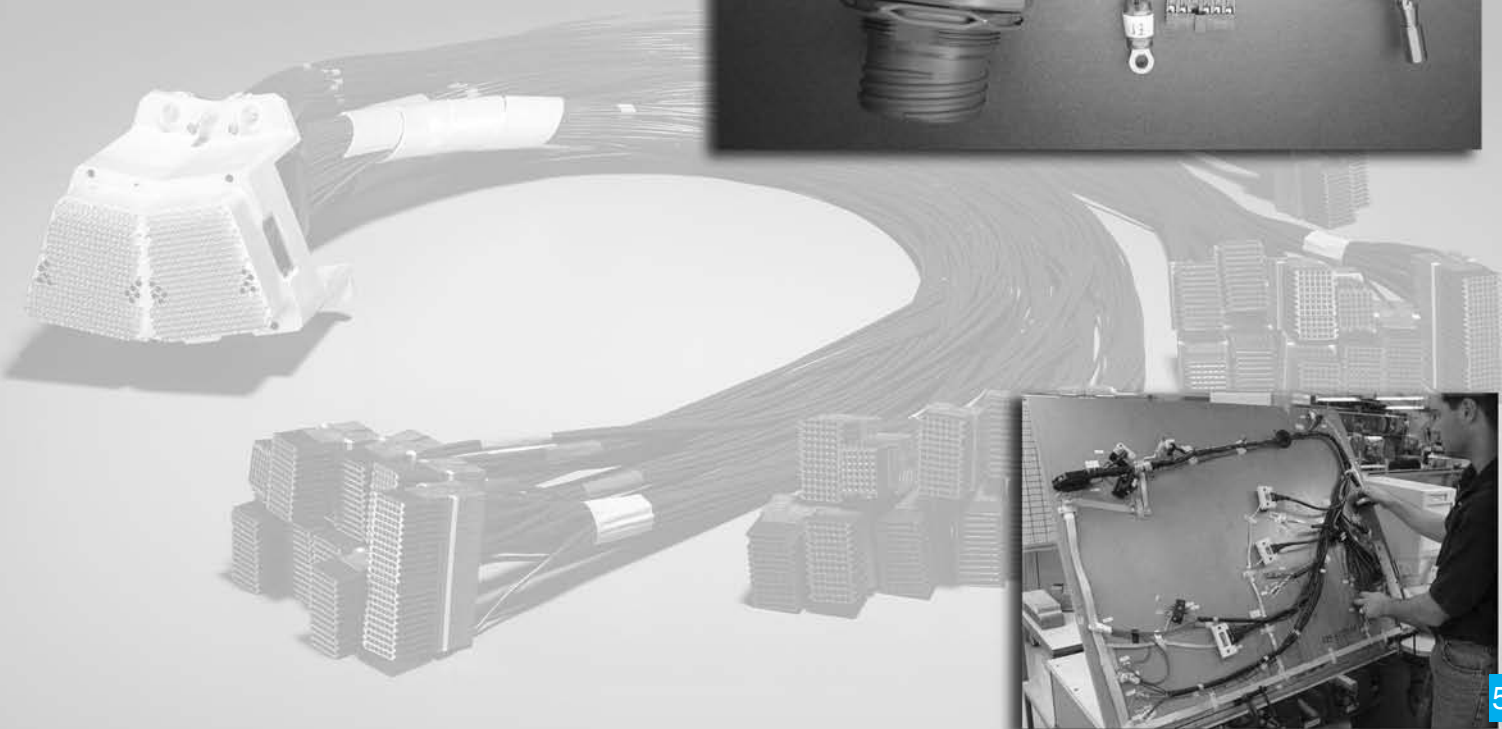
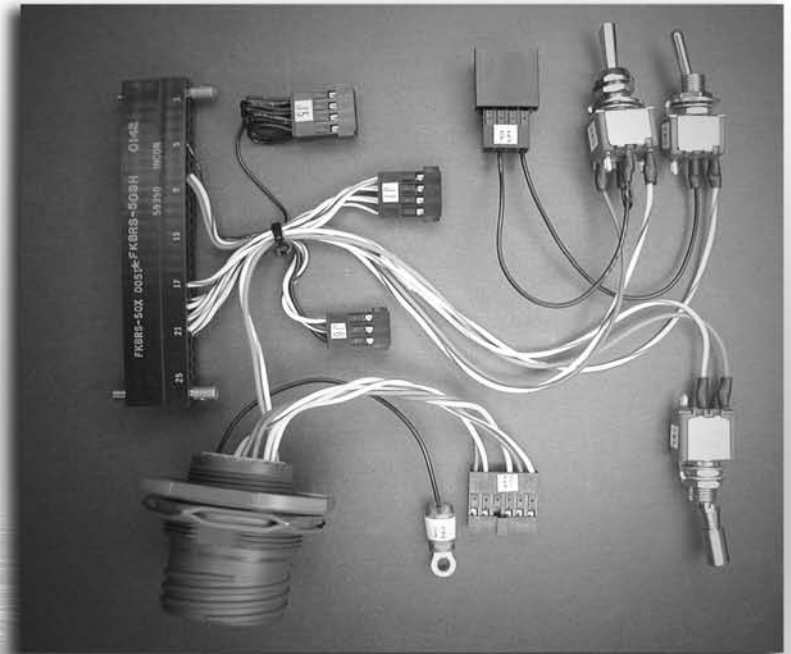
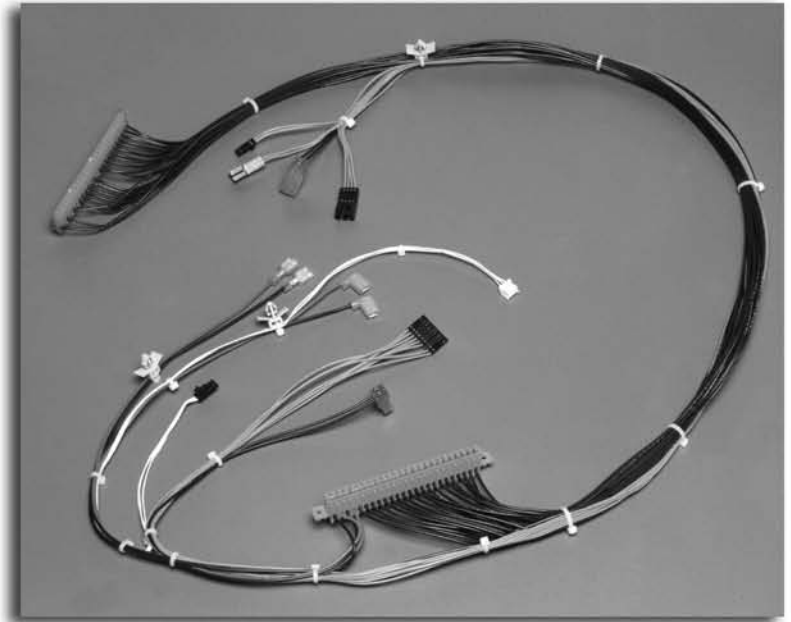
Cable Harnesses

Cable harnesses come in all shapes and sizes, from 28 AWG hook-up wire to robust power carrying wire. There can be as many as several hundred contact points in a harness.

Products range from panel assemblies, power supplies, aftermarket automobile harnesses, to infrared camera harnesses. But whatever the size or complexity, we are always guided by our commitment to Quality and On-Time delivery.

- “Quick-Turn” Prototyping
- Engineering Design Capabilities
- Electrically tested on the build-board
- Combinations of single, multi-wire or coaxial cable
- UL Recognized/CSA Certified/ISO 9002 Approved

With short manufacturing lead-times, and daily deliveries, we can minimize your inventory investment.



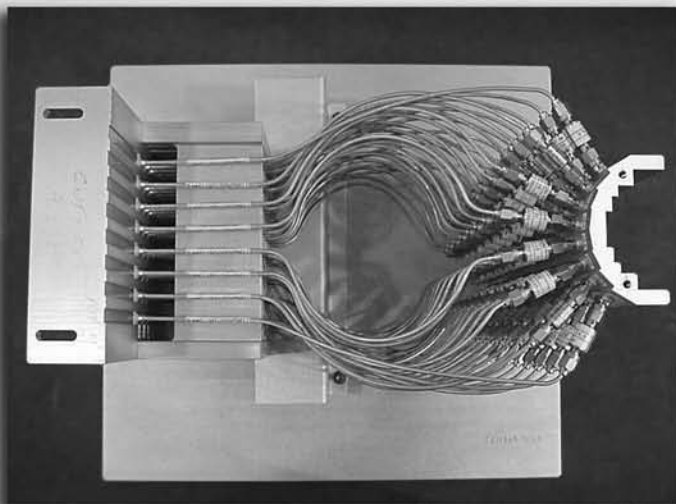
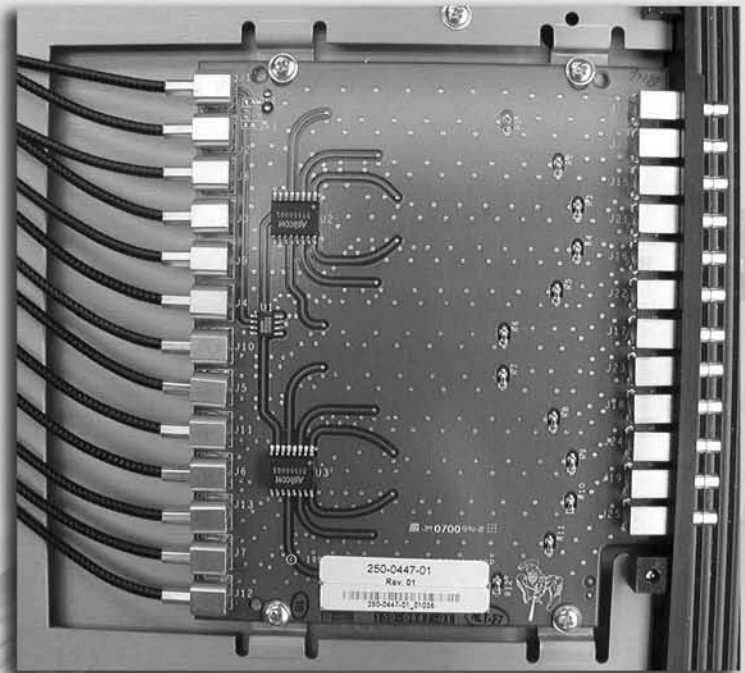
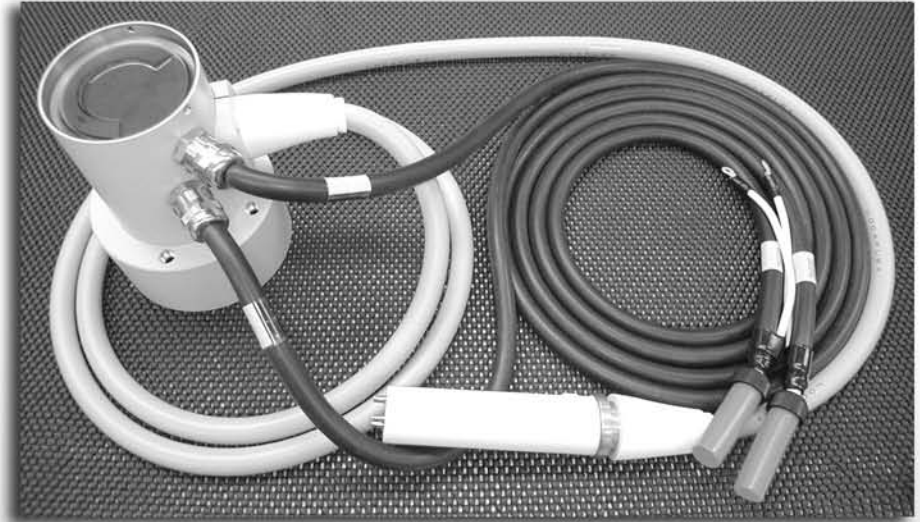
Electro-Mechanical

Tensolite, with decades of engineering and manufacturing experience, will procure all the subparts, build the custom cable to your specification, over-mold the connectors, assemble the module per your specifications and electrically test your product.

Many of our electro-mechanical products incorporate LED's, relays, breakers, toggle switches, RF filters, printed circuit boards, microcircuit connectors, and a variety of military circular connectors.

Capabilities:

- Over-molding
- Multistage Strip
- Automated cut, strip, crimp (Komax Gamma 333)
- Laser Cutting
- Induction Soldering
- Hot Bar Soldering
- Resistance Soldering
- Autosplice (soldering alternative)
- Ultrasonic Welding
- Video Inspection System
- Variety of Schleuniger Coaxial Cutting/Stripping equipment
- ESD environment



Electrical Testing

Tensolite builds quality into our products through our Lean Manufacturing processes. We test our products in-line as they are being built, assuring our customers that they are receiving high level, consistent quality everyday.

Our Quality Policy is simple and straight forward:

“Give our customers what they want, when they want it, 100% of the time.”

Tensolite’s philosophy is based on continuous improvement of our processes, contributing to the delivery of products and services to all of our customers.

General Purpose Electrical Testing:

Using Omni, Cirrus, and Checksum testing systems.

- Automatic self-learn of an assembly
- Loop-tests for intermittent failures
- Systems accommodate from 100 to 1,024 test points
- Insulation resistance testing up to 1,500VDC
- Test for opens and shorts
- Error logging in an exportable format
- AC Hipot, 1000V

RF/Microwave Testing:

Network analyzer capabilities to provide reflection and transmission measurements, and frequency range from 300 KHz to 65 GHz using our Vector, and Scalar Network Analyzers.

Reflection Measurements:

- VSWR
- Return Loss
- Reflection Coefficient

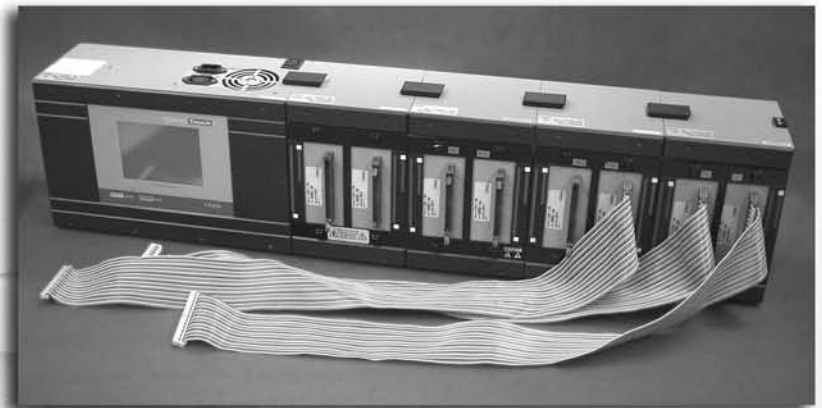
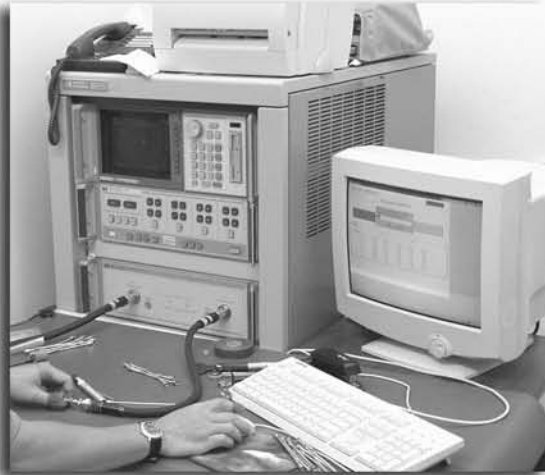
Impedance

- Transmission Measurements
- Insertion Loss
- Electrical Delay Phase Deviations
- Isolation (crosstalk)

TDR & TDT Measurements:

Time Domain Reflectometry and Time Domain Transmission measurements used for analyzing loss lines.

- Rise time degeneration
- Signal integrity analysis
- TDR characterization of cable & high-speed digital communications.
- True differential TDR measurements of dual coaxial cable and assemblies.



RF/Microwave Flexible Cable Assemblies

Tensolite's RF/Microwave flexible cable assemblies are designed with the goal of cost effectiveness while continuing to provide the quality and workmanship through "quick turn prototyping" and Lean Manufacturing Processes.

The flexible assemblies are available in a variety of custom flexible microwave coax and RG MIL-C-17 rated coaxial cables ranging in small diameter such as RG-178 to large diameter RG-214.

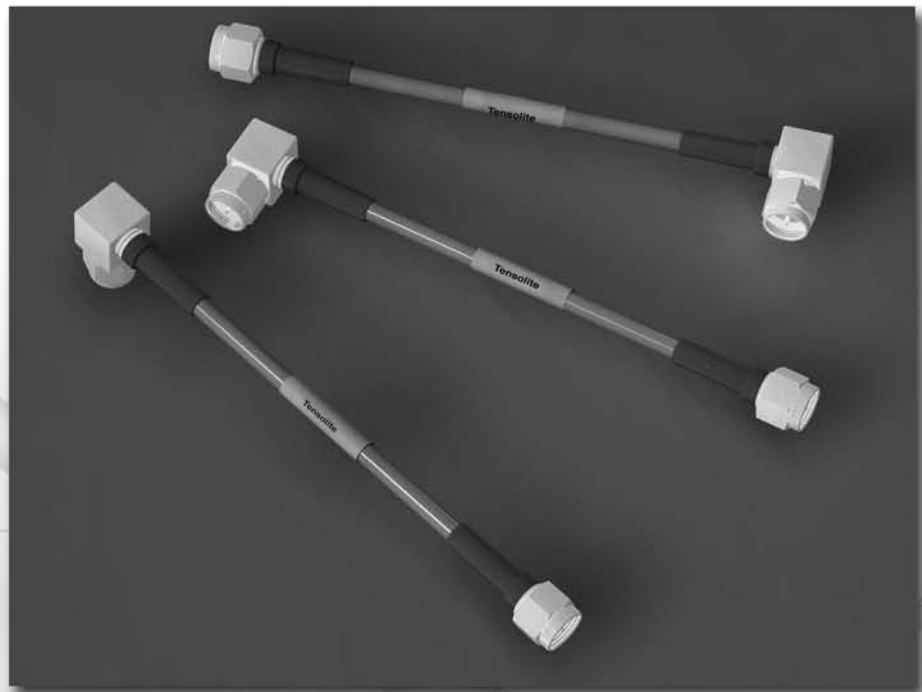
Tensolite uses our own line of high performance connectors, and commercially available crimp style, non-captive contact connectors. All finishes and dimensions are IAW MIL-C 39012, and attachment strain reliefs are achieved through the use of MIL-I-23053 shrink tubing.

Applications:

- O.E.M.
- Aftermarket replacement
- Within test equipment
- Between test equipment hook-up
- Commercial/Telecommunications
- Radar/control systems

Features:

- Microwave frequency operation
- Highest quality commercial connectors
- Large selection
- Proven attachment methods
- On-time deliveries



Tensolite

Semi-Rigid Cable Assemblies

Tensolite's semi-rigid cable assemblies are among the highest quality assemblies available today. We custom build these cables to meet your specifications.

Tensolite uses only the highest quality MIL-spec semi-rigid cable ranging from .034" to .250" in diameter, and a wide variety of commercial, QPL, and custom connectors including Tensolite's own line of high performance connectors ranging from SMP's, SSMP's, SMA's, smK's, BMA's, TNC's and Type N's.

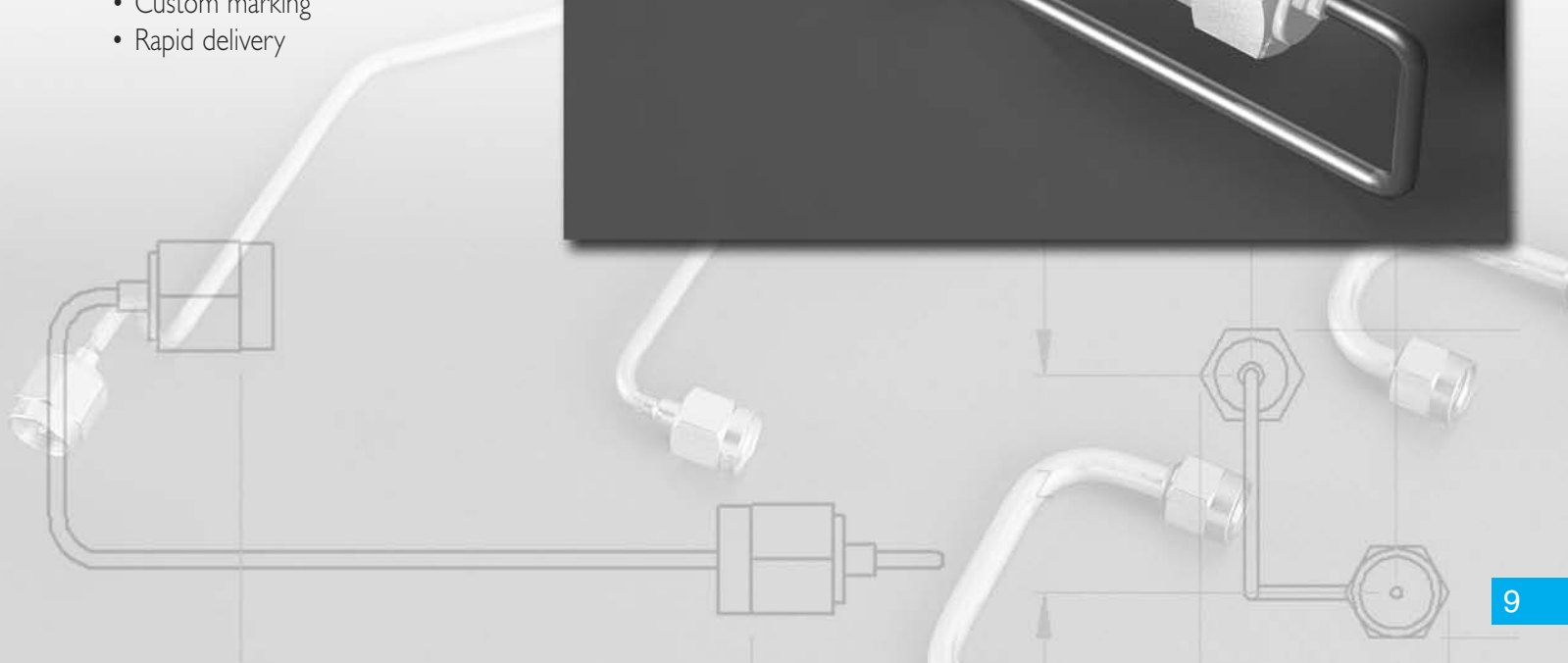
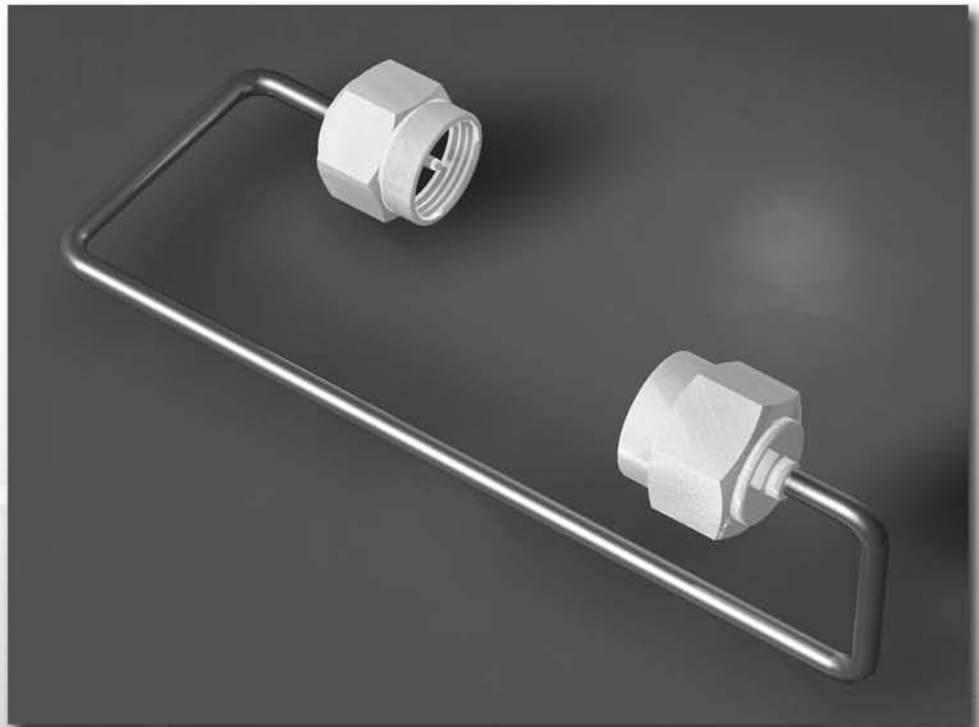
All soldering is done in a MIL-STD-2000 environment by certified assemblers. We maintain a MIL-I-45208A inspection system with the calibration, sampling procedures and documentation to meet your most demanding requirements.

Applications:

- Military or commercial O.E.M.
- Test equipment
- High shielding environments
- Low cost RF transmission needs

Features:

- Computerized forming equipment
- In-house test capability through 65 GHz
- Tight phase matching capability
- Custom marking
- Rapid delivery



Delay Lines

Passive coax delay lines are an excellent means for providing short delays in RF and Microwave systems. Our engineers will work with you to configure a delay line solution that meets your specific electrical and packaging requirements.

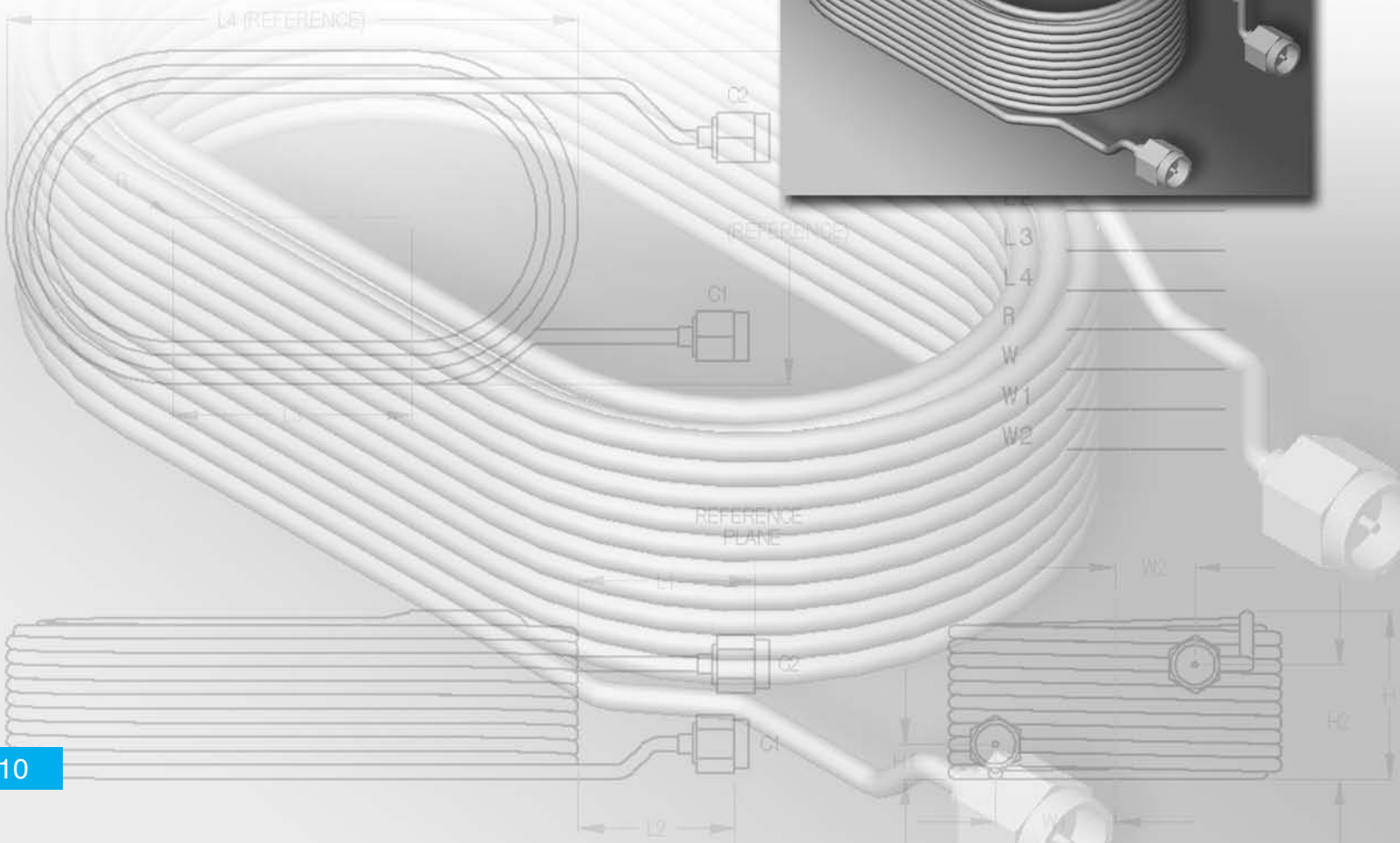
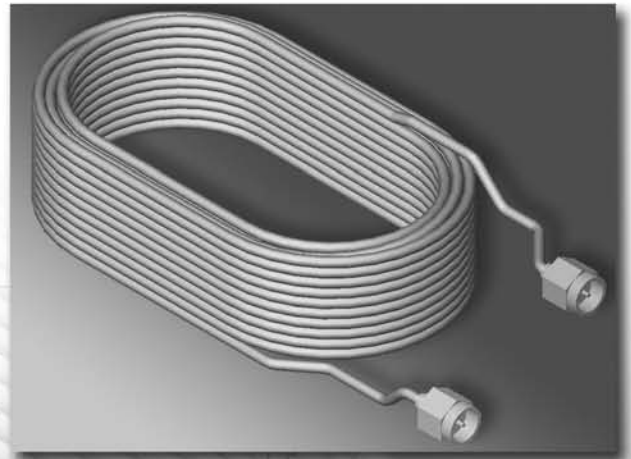
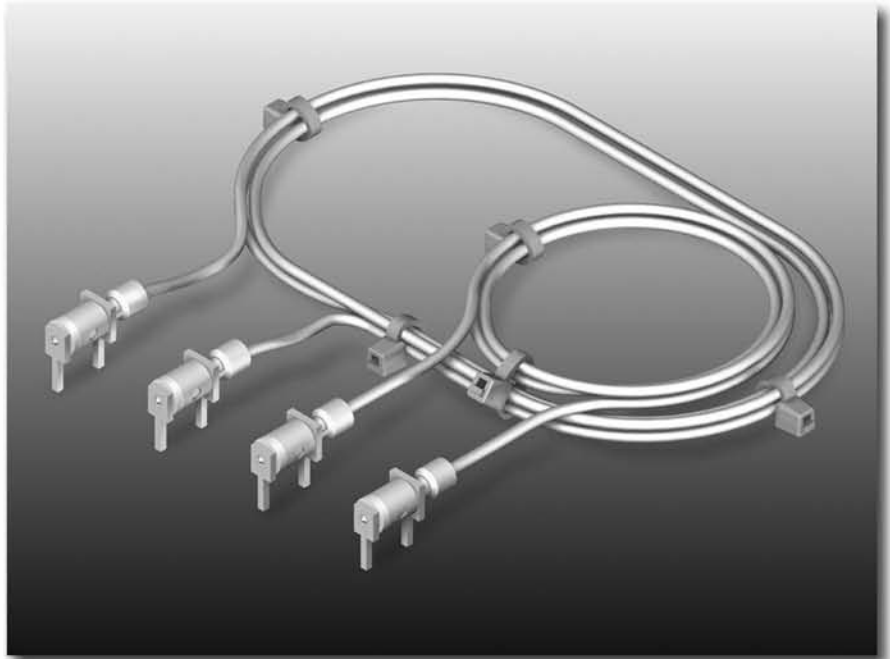
Tensolite uses the highest quality semi-rigid and Semi-Flex[®] cable in sizes ranging from .047" to .250" in diameter as well as a variety of flexible coax cables. A wide variety of terminations are available including stripped ends for direct PCB termination.

Applications

- Land mobile radio
- Test equipment
- Cellular base stations

Features:

- Delay and skew tolerances to less than 15 ps
- Excellent phase stability
- Multiple delays in one package
- Low loss and VSWR



**FOR ADDITIONAL CATALOGS
CALL "THE CATALOG REQUEST LINE"
1-800-362-3539**

**CALL 1-800-362-FLEX
FOR ADDITIONAL INFORMATION**

**CHECK OUT TENSOLITE'S WEB SITE:
www.tensolite.com**

EMAIL US AT rfmicrowave@tensolite.com

FAX: 360-759-4016

How to Order:

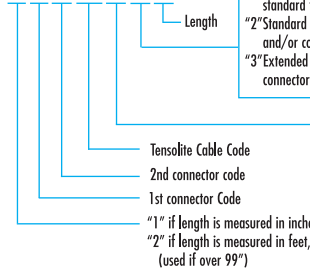
Designate the desired assembly by choosing from the available cables and connectors from the matrix to the far right. Insert the codes at the appropriate location as noted in the example. **Connector codes should be listed in increasing numerical sequence.**

Contact Tensolite for cables and connectors not shown.

ABBREVIATIONS
FEPFluorinated ethylene propylene
PURPolyurethane

5 ALL OTHER ASSEMBLIES

X - XXXX - XXX - X X XX



Specify
 0 No microwave test req. (Typical assemblies 1GHz) or less
 1 Reduced frequency microwave test requirement (Typically less than standard frequency of the cable and/or connectors used).
 2 Standard frequency microwave test requirement for the cable and/or connectors used).
 3 Extended frequency microwave test requirement for the cable and/or connectors used)

Specify
 1 Specific customer requirement when no customer drawing specification is available
 3 Standard product
 4 Standard product with at least one captive interface
 5 Standard product with at least one SMA Anti-Torque plug.
 P Standard delay matching to ± 4.2 Pico Seconds

Application Feature	Static Ground	Laboratory	Mobil Ground	Flight Hardware
1 Fixed	461,463,465, 561, 563, 565, 794, 604,600,601, 606, 620, 621, 650, 651, 617,618, 678	461,463,465, 561, 563, 565, 794, 604,600, 601, 606, 620, 621, 650, 651, 617,618, 678	461,463,465, 561, 563, 565, 794, 604,600, 601, 606, 620, 621, 650, 651, 617,618, 678	461,463, 604,600, 601, 606, 620, 621, 650, 651, 617,618, 678
Multiple flexures	676, 602, 504,524,511,510, 521,301	676, 602, 504,524,511,510, 521,301	676, 602, 504,524,511,510, 521,301	676, 602, 504,524,511,510, 521,301
Multiple connections	"Workhorse"	"Workhorse"	"Workhorse"	N/A

2 **Expected lifetime connect/disconnect cycles**
 Recommended Assembly Type

676/678	604, 606, 650, 651	465, 561, 563, 565, 794	524	"Workhorse"
5	25	50	500	5000

All cable assemblies are labeled and 100% inspected to Tensolite's rigorous quality standards. Each item is tested for continuity, dielectric withstanding voltage and insulation resistance. The product is individually unit packaged and tagged for maximum protection and ease of identification. Phase matching within ±1.5° per GHz is available as a standard option on most cable assemblies.

3

Tensolite Cable Code	Description	Cable Diameter	Frequency Range	Jacket Material
461	Q-Flex®	.105	18 & 26.5	FEP
463	Q-Flex®	.163	18 & 26.5	FEP
465	Q-Flex®	.270	18	FEP
561	Q-Flex Plus®	.115	18 & 26.5	PUR
563	Q-Flex Plus®	.180	18 & 26.5	PUR
565	Q-Flex Plus®	.290	18	PUR
794	Q-Flex®	.105	40	FEP
604	Semi-Flex®	.047	18, 26.5 & 40	Tinned filled high strength wire braid
600	Semi-Flex®	.086	18, 26.5 & 40	Tinned filled high strength wire braid
601	Semi-Flex®	.141	18, 26.5 & 40	Tinned filled high strength wire braid
606	Semi-Flex®	.250	18	Tinned filled high strength wire braid
620	Semi-Flex® plus	.112	18, 26.5 & 40	PUR
621	Semi-Flex® plus	.180	18 & 26.5	PUR
650	Semi-Flex® plus HT	.100	18, 26.5 & 40	FEP
651	Semi-Flex® plus HT	.151	18 & 26.5	FEP
617	Semi-Flex II®	.086	20 & 40	Aluminum
618	Semi-Flex II®	.141	20 & 26.5	Aluminum
678	Semi-Rigid	.086	20 & 40	Copper
676	Semi-Rigid	.141	20 & 26.5	Copper
602	Semi-Rigid Low Loss	.141	20 & 26.5	Copper
504	Workhorse®	.200	18 & 26.5	FEP
524	Workhorse Plus®	.217	18	PUR
511	Ultra Flex	.123	8	PUR
510	Super Flex	.216	8	PUR
521	75 Ohm Super Flex	.216	3	PUR
301	Flexible Low Loss	.200	18	FEP

4 **CONNECTOR CODES**

SERIES	BNC	TNC	TYPE N	SMA	SSMA	SMB	SMC	MCX	smK	SMP	SSMP	BMA	1.85 mm	2.4 mm	3.5 mm	7 mm
Max Frequency in GHz	4	18	18	26.5	38	4	10	6	40	40	60	22	60	50	33	18
CONFIGURATION																
Plug	24	30	18	36	54	42	48	M6	K6	G6	R6	R1	V6	87	72	78
Right Angle Plug	25	31	19	37	55	43	49	M7	K7	G7	R7	N/A	V7	88	73	N/A
Jack	26	32	20	38	56	44	50	M8	K8	G8	R8	R2	V8	89	74	N/A
Panel Jack	27	33	21	39	57	45	51	M9	K9	G9	R9	R4	V9	90	75	N/A
Bulkhead Jack	28	34	22	40	58	46	52	M0	K0	N/A	N/A	R3	N/A	91	76	N/A

HOW TO USE THIS GUIDE

- 1** Choose best description of your application
- 2** Choose the lifetime connect/disconnect cycle
- 3** Choose your cable

- 4** Choose your connectors
- 5** Build your part number
- 6** Call Tensolite

800-362-FLEX
Tensolite
 A CARLISLE Company

QUOTATION FORM

Today's date: _____

Directions: Photocopy this form. Fill in blanks, circle correct answers, or check boxes where appropriate, fax to Tensolite 360-759-4016 or visit WWW.TENSOLITE.COM

Mechanical:

_____ in/ft. long. (*Length is specified to reference plane of straight connectors and/or center line of right angles*)

Connector #1	Connector #2	
_____	_____	Series: (SMA, Type N, BNC, SMP, etc.)
_____	_____	Center contact: (male or female)
_____	_____	Config.: (straight, right angle, panel mount, etc.)
_____	_____	Captive or Non-Captive center contact?

Cable type: _____ (if unknown fill in at least next 2 lines & electrical info below)

Flexible Semi-Flex® Semi-rigid Max outside dia: _____ Min inside bend radius: _____

Temp. range: _____ to _____ Room temp. Fixed during use Flexed during use.

of markers: _____ Requires Armor Requires abrasion resistance only

Requires non-magnetic materials Requires non-conductive cable jacket

Other: _____

Electrical Performance:

Frequency range: _____ to _____ MHz (or) GHz _____ to 1.0 max VSWR _____ db max loss

Isolation: _____ db@ _____ MHz (or) GHz Phase: _____ (delay)

Phase defined as: A. matched to a std B. _____ deg @ MHz (or) GHz C. _____ cm of air D. _____ ns

Other: _____

Application:

Quantity and Delivery Requirements

Commercial Military Test equipment Ground based Airborne Shipboard Computer/Telecommunication

Name: _____ Title/Job: _____

Company: _____ Mail Stop: _____

Address: _____ City: _____ State: _____ Zip: _____

Tel: _____ Fax: _____ Email: _____ Need quote by: _____

Tensolite RF/Microwave Interconnects 1-800-362-FLEX

A **CARLISLE** Company

Website: www.tensolite.com

QBC™ SERIES**(Quality Blind Mate Connector Assemblies)****QBC** (Quality Blind Mate Connector)

The Tensolite QBC™ Series is a uniquely designed blind mate interface system, which mates with Industry Standard Female SMA, SMB, SMC, Type N, Type F, BNC and TNC Connectors. Tensolite's QBC™ Series enables an overall lower-cost and "ease-of-use" solution for your Blind Mate applications. The QBC™ system provides a minimum of .025 radial misalignments and .060 axial displacements. Achieving multiple and repeatable error-free engagements, while maintaining low insertion loss and VSWR. The Tensolite QBC™ Series offers two mounting styles and is available in 50 and 75-ohm interfaces.

APPLICATIONS

Tensolite's QBC™ series is ideal for use in both end product and production test applications.

Tested Interconnect Frequencies:

QBC-SMA @ 18GHz	QBC-SMB @ 4GHz
QBC-SMC @ 10GHz	QBC-Type N @ 12GHz
QBC-Type F @ 3GHz	QBC-BNC @ 4GHz
QBC-TNC @ 12GHz	

FEATURES

- Simultaneous multiple engagements, NO PRACTICAL LIMITS.
- Mates with standard MIL-STD-348A interfaces.
- Extended radial capture -SURPASSES INDUSTRY STANDARD.
- Ideal for Rack Blind Mate & Hot Swapable Applications
- Deployed on Backplanes, PCB & Micro Circuit Testers
- Eliminates mis-wires & reduces ergonomic issues.

Tensolite RF/Microwave Interconnects 1-800-362-FLEX

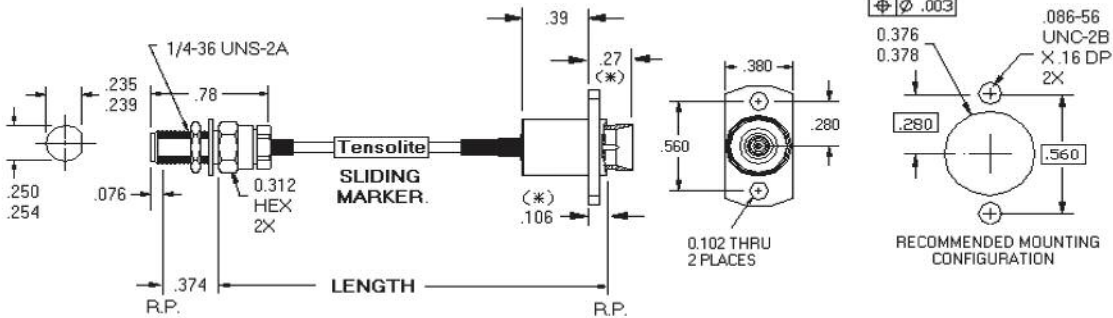
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Website: www.tensolite.com

TENSOLITE CABLE ASSEMBLY

SMA FEMALE BULKHEAD TO QBC SMA PLUG ON 561 Q-FLEX PLUS CABLE

NOTE: (*) DIMENSIONS GIVEN ARE REFERENCED AT .030 PRELOAD



ELECTRICAL SPECIFICATIONS	
IMPEDANCE, NOMINAL:	50 OHMS
CAPACITANCE NOMINAL:	28.8 pf/FOOT
RELATIVE SHIELDING:	> -90 db MIN. (1 FT)
VELOCITY OF PROPAGATION, NOMINAL:	70.5 %
INSULATION RESISTANCE:	1000 MEGOHMS MIN.
DIELECTRIC WITHSTANDING VOLTAGE:	1000 VRMS MIN.
ELECTRICAL DELAY:	1.44 ns/FOOT
ELECTRICAL DELAY:	120 ps/INCH
MAX. PULSE RF POWER:	928 WATTS (INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)
F (IN GHz) ----->	1 2 4 6 12 18
MAX. CW WATTS -->	34 24 16 13 9 7

Patented: US Patent Number 5,746,617 and others.

FEATURES

- : RADIAL FLOAT +/- .025 MAX.
- : LONGITUDINAL FLOAT +.030 MIN AFTER MATING.
- : MATES WITH STANDARD SMA FEMALE
- : AVAILABLE ONLY ON TENSOLITE CABLE ASSEMBLIES.
- : SERVICE LOOP REQUIRED FOR INSTALLATION
- : 8 INCH MINIMUM LENGTH
- : CONSULT FACTORY FOR ADDITIONAL LENGTHS

MECHANICAL SPECIFICATIONS:	
CABLE MAX. DIAMETER:	0.120 INCHES
MIN. BEND RADIUS:	0.71 INCHES
PREFERRED BEND RADIUS:	1.19 INCHES
CONNECTOR RETENTION:	30 POUNDS MIN.
TEMPERATURE RANGE:	-50 / +85 DEGREES C
FORCE TO ENGAGE QBC:	3 POUNDS NOM.
SMA MATING TORQUE:	7-10 INCH POUNDS
CONNECTOR INTERFACES:	MIL-STD-348

DESCRIPTION	MATERIAL	FINISH OR COLOR
CABLE JACKET:	POLYURETHANE	CLEAR
MARKER:	MIL-I-23053	GRAY
BOOTS:	MIL-I-23053	BLACK
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
SMA BODY:	ASTM A 582 303 STAINLESS STEEL	PASSIVATE PER QQ-P-35
QBC SHELL:	ASTM B16 BRASS	MIL-G-45204 GOLD PLATED
QBC HOUSING:	ASTM A 582 303 STAINLESS STEEL	PASSIVATE PER QQ-P-35
CONTACTS:	ASTM B196 BeCu	MIL-G-45204 GOLD PLATED
INSULATORS:	ASTM D1710 PTFE	NONE
SOLVENTS:	NO OZONE DEPLETING MATERIALS ARE USED	

PART NUMBER	LENGTH INCHES	+ - LENGTH	WEIGHT OUNCES	MAXIMUM VSWR :1 AT FREQUENCY (IN GHz.)							MAXIMUM INSERTION LOSS IN dB AT FREQ. (IN GHz.)						LENGTH CM
				UP TO 1	1 TO 2	2 TO 4	4 TO 6	6 TO 12	12 TO 18	UP TO 1	1 TO 2	2 TO 4	4 TO 6	6 TO 12	12 TO 18		
1-4063-561- 3208	S	8.0	0.25	0.4	1.13	1.17	1.21	1.23	1.30	1.35	0.25	0.37	0.57	0.75	1.23	1.70	20.3
1-4063-561- 3210	S	10.0	0.25	0.4	1.13	1.17	1.21	1.23	1.30	1.35	0.29	0.44	0.69	0.91	1.50	2.07	25.4
1-4063-561- 3212	S	12.0	0.25	0.5	1.13	1.17	1.21	1.23	1.30	1.35	0.34	0.51	0.81	1.07	1.77	2.44	30.5
1-4063-561- 3218	S	18.0	0.25	0.6	1.13	1.17	1.21	1.23	1.30	1.35	0.48	0.73	1.17	1.55	2.58	3.56	45.7
1-4063-561- 3224	S	24.0	0.25	0.7	1.13	1.17	1.21	1.23	1.30	1.35	0.62	0.95	1.52	2.02	3.39	4.68	61.0
1-4063-561- 3230	S	30.0	0.30	0.8	1.13	1.17	1.21	1.23	1.30	1.35	0.76	1.17	1.88	2.50	4.20	5.80	76.2
1-4063-561- 3236	S	36.0	0.36	0.9	1.13	1.17	1.21	1.23	1.30	1.35	0.90	1.39	2.23	2.98	5.00	6.92	91.4
1-4063-561- 3248	S	48.0	0.48	1.2	1.13	1.17	1.21	1.23	1.30	1.35	1.18	1.83	2.94	3.93	6.62	9.15	121.9
1-4063-561- 3260	S	60.0	0.60	1.4	1.13	1.17	1.21	1.23	1.30	1.35	1.46	2.27	3.66	4.89	8.24	11.39	152.4
1-4063-561- 3272	S	72.0	0.72	1.7	1.13	1.17	1.21	1.23	1.30	1.35	1.74	2.71	4.37	5.84	9.86	13.62	182.9
1-4063-561- 3284	S	84.0	0.84	1.9	1.13	1.17	1.21	1.23	1.30	1.35	2.02	3.15	5.08	6.79	11.47	15.86	213.4

S = STANDARD LENGTHS

MAXIMUM SPECIFICATIONS ARE PRODUCT MAXIMUM INCLUDING MEASURING SYSTEM UNCERTAINTY.

NOTE: PRODUCT SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.

PRODUCT SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CONSULT FACTORY FOR PRODUCT CHARACTERISTICS AT OTHER CONDITIONS.

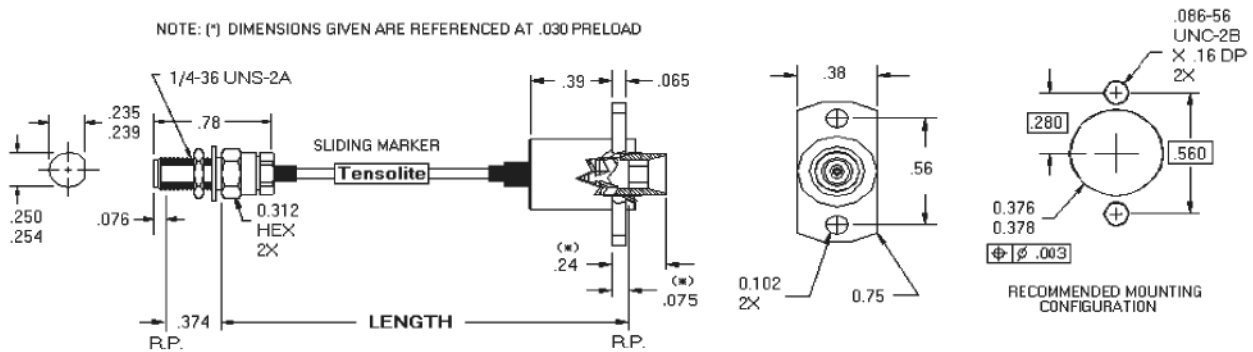
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TENSOLITE CABLE ASSEMBLY

SMA FEMALE BULKHEAD TO QBC SMB PLUG ON 561 Q-FLEX PLUS CABLE

NOTE: (*) DIMENSIONS GIVEN ARE REFERENCED AT .030 PRELOAD



ELECTRICAL SPECIFICATIONS

IMPEDANCE, NOMINAL:	50 OHMS			
CAPACITANCE NOMINAL:	28.8 pF/FOOT			
RELATIVE SHIELDING:	> -90 db MIN. (1 FT)			
VELOCITY OF PROPAGATION, NOMINAL:	70.5 %			
INSULATION RESISTANCE:	1000 MEGOHMS MIN.			
DIELECTRIC WITHSTANDING VOLTAGE:	1000 VRMS MIN.			
ELECTRICAL DELAY:	1.44 ns/FOOT			
ELECTRICAL DELAY:	120 ps/INCH			
MAX. PULSE RF POWER:	928 WATTS			
(INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)				
F (IN GHz) ----->	0.5	1	2	4
MAX. CW WATTS -->	54	38	26	18

MECHANICAL SPECIFICATIONS:

CABLE MAX. DIAMETER:	0.120	INCHES
MIN. BEND RADIUS:	0.71	INCHES
PREFERRED BEND RADIUS:	1.19	INCHES
CONNECTOR RETENTION:	30	POUNDS MIN.
TEMPERATURE RANGE:	-50 / +85	DEGREES C
FORCE TO ENGAGE QBC:	3	POUNDS NOM.
SMA MATING TORQUE:	7-10	INCH POUNDS
CONNECTOR INTERFACES:	MIL-STD-348	

Patented: US Patent Number 5,746,617 and others.

FEATURES

- : RADIAL FLOAT +/- .025 MAX.
- : LONGITUDINAL FLOAT +.030 MIN AFTER MATING.
- : MATES WITH STANDARD SMB JACK
- : AVAILABLE ONLY ON TENSOLITE CABLE ASSEMBLIES.
- : SERVICE LOOP REQUIRED FOR INSTALLATION
- : 8 INCH MINIMUM LENGTH
- : CONSULT FACTORY FOR ADDITIONAL LENGTHS

DESCRIPTION	MATERIAL	FINISH OR COLOR
CABLE JACKET:	POLYURETHANE	CLEAR
MARKER:	MIL-I-23053	GRAY
BOOTS:	MIL-I-23053	BLACK
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
SMA BODY:	ASTM A 582 303 STAINLESS STEEL	PASSIVATE PER QQ-P-35
QBC SHELL:	ASTM B16 BRASS	MIL-G-45204 GOLD PLATED
QBC HOUSING:	ASTM A 582 303 STAINLESS STEEL	PASSIVATE PER QQ-P-35
CONTACTS:	ASTM B196 BeCu	MIL-G-45204 GOLD PLATED
INSULATORS:	ASTM D1710 PTFE	NONE
SOLVENTS:	NO OZONE DEPLETING MATERIALS ARE USED	

PART NUMBER		LENGTH INCHES	+ - LENGTH	WEIGHT OUNCES	MAXIMUM VSWR :1 AT FREQUENCY (IN GHz.)				MAXIMUM INSERTION LOSS IN dB AT FREQ. (IN GHz.)				LENGTH CM
					UP TO .5	.5 TO 1	1 TO 2	2 TO 4	UP TO .5	.5 TO 1	1 TO 2	2 TO 4	
1-40B1-561- 3208	S	8.0	0.25	0.4	1.13	1.17	1.21	1.23	0.18	0.26	0.39	0.59	20.3
1-40B1-561- 3210	S	10.0	0.25	0.4	1.13	1.17	1.21	1.23	0.21	0.30	0.46	0.71	25.4
1-40B1-561- 3212	S	12.0	0.25	0.5	1.13	1.17	1.21	1.23	0.24	0.35	0.54	0.83	30.5
1-40B1-561- 3218	S	18.0	0.25	0.6	1.13	1.17	1.21	1.23	0.33	0.49	0.76	1.19	45.7
1-40B1-561- 3224	S	24.0	0.25	0.7	1.13	1.17	1.21	1.23	0.42	0.63	0.98	1.54	61.0
1-40B1-561- 3230	S	30.0	0.30	0.8	1.13	1.17	1.21	1.23	0.51	0.77	1.20	1.90	76.2
1-40B1-561- 3236	S	36.0	0.36	0.9	1.13	1.17	1.21	1.23	0.60	0.91	1.42	2.25	91.4
1-40B1-561- 3248	S	48.0	0.48	1.2	1.13	1.17	1.21	1.23	0.79	1.19	1.86	2.96	121.9
1-40B1-561- 3260	S	60.0	0.60	1.4	1.13	1.17	1.21	1.23	0.97	1.47	2.30	3.68	152.4
1-40B1-561- 3272	S	72.0	0.72	1.7	1.13	1.17	1.21	1.23	1.15	1.75	2.74	4.39	182.9
1-40B1-561- 3284	S	84.0	0.84	1.9	1.13	1.17	1.21	1.23	1.33	2.03	3.18	5.10	213.4

S = STANDARD LENGTHS

MAXIMUM SPECIFICATIONS ARE PRODUCT MAXIMUM INCLUDING MEASURING SYSTEM UNCERTAINTY.

NOTE: PRODUCT SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.

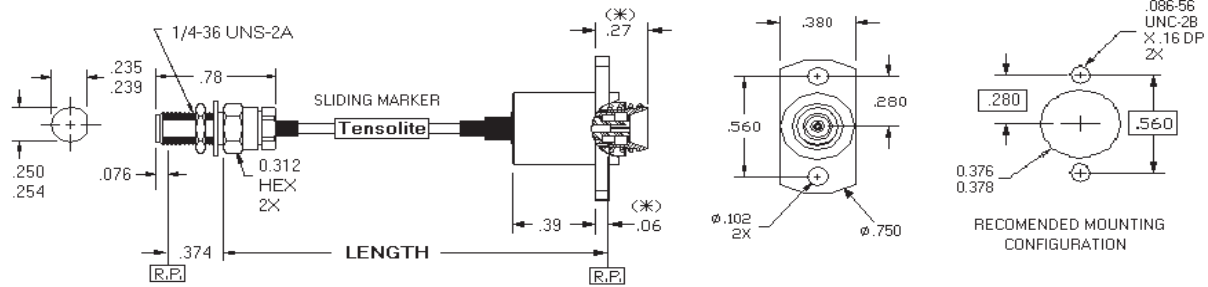
PRODUCT SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CONSULT FACTORY FOR PRODUCT CHARACTERISTICS AT OTHER CONDITIONS.

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TENSOLITE CABLE ASSEMBLY TECHNICAL DATA

**SMA FEMALE BULKHEAD TO QBC SMC PLUG
ON 561 Q-FLEX® PLUS CABLE.**

NOTE: (*) DIMENSIONS GIVEN ARE REFERENCED AT .030 PRELOAD



ELECTRICAL SPECIFICATIONS	
IMPEDANCE, NOMINAL:	50 OHMS
CAPACITANCE NOMINAL:	28.8 pF/FOOT
RELATIVE SHIELDING:	> -90 db MIN. (1 FT)
VELOCITY OF PROPAGATION, NOMINAL:	70.5 %
INSULATION RESISTANCE:	1000 MEGOHMS MIN.
DIELECTRIC WITHSTANDING VOLTAGE:	1000 VRMS MIN.
ELECTRICAL DELAY:	1.44 ns/FOOT
ELECTRICAL DELAY:	120 ps/INCH
MAX. PULSE RF POWER:	928 WATTS
(INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)	
F (IN GHz) ----->	1 2 4 6 10
MAX. CW WATTS ---->	34 24 16 13 10

Patented: US Patent Number 5,746,617 and others.

- FEATURES**
- : RADIAL FLOAT +/- .025 MAX.
 - : LONGITUDINAL FLOAT +.030 MIN AFTER MATING.
 - : MATES WITH STANDARD SMC JACK
 - : AVAILABLE ONLY ON TENSOLITE CABLE ASSEMBLIES.
 - : SERVICE LOOP REQUIRED FOR INSTALLATION
 - : 8 INCH MINIMUM LENGTH
 - : CONSULT FACTORY FOR ADDITIONAL LENGTHS

MECHANICAL SPECIFICATIONS:	
CABLE MAX. DIAMETER:	0.120 INCHES
MIN. BEND RADIUS:	0.71 INCHES
PREFERRED BEND RADIUS:	1.19 INCHES
CONNECTOR RETENTION:	30 POUNDS MIN.
TEMPERATURE RANGE:	-50 / +85 DEGREES C
FORCE TO ENGAGE QBC:	3 POUNDS NOM.
SMA MATING TORQUE:	7-10 INCH POUNDS
CONNECTOR INTERFACES:	MIL-STD-348

DESCRIPTION	MATERIAL	FINISH OR COLOR
CABLE JACKET:	POLYURETHANE	CLEAR
MARKER:	MIL-I-23053	GRAY
BOOTS:	MIL-I-23053	BLACK
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
SMA BODY:	ASTM A 582 303 STAINLESS STEEL	PASSIVATE PER QQ-P-35
QBC SHELL:	ASTM B16 BRASS	MIL-G-45204 GOLD PLATED
QBC HOUSING:	ASTM A 582 303 STAINLESS STEEL	PASSIVATE PER QQ-P-35
CONTACTS:	ASTM B196 BeCu	MIL-G-45204 GOLD PLATED
INSULATORS:	ASTM D1710 PTFE	NONE
SOLVENTS:	NO OZONE DEPLETING MATERIALS ARE USED	

PART NUMBER	LENGTH INCHES	+ - LENGTH	WEIGHT OUNCES	MAXIMUM VSWR :1 AT FREQUENCY (IN GHz.)						MAXIMUM INSERTION LOSS IN dB AT FREQ. (IN GHz.)						LENGTH CM	
				UP TO .5	.5 TO 1	1 TO 2	2 TO 4	4 TO 6	6 TO 10	UP TO .5	.5 TO 1	1 TO 2	2 TO 4	4 TO 6	6 TO 10		
1-40J0-561- 3208	S	8.0	0.25	0.4	1.13	1.17	1.21	1.23	1.30	1.35	0.18	0.26	0.39	0.59	0.78	1.14	20.3
1-40J0-561- 3212	S	12.0	0.25	0.5	1.13	1.17	1.21	1.23	1.30	1.35	0.24	0.35	0.54	0.83	1.10	1.61	30.5
1-40J0-561- 3218	S	18.0	0.25	0.6	1.13	1.17	1.21	1.23	1.30	1.35	0.33	0.49	0.76	1.19	1.58	2.31	45.7
1-40J0-561- 3224	S	24.0	0.25	0.7	1.13	1.17	1.21	1.23	1.30	1.35	0.42	0.63	0.98	1.54	2.06	3.01	61.0
1-40J0-561- 3230	S	30.0	0.30	0.8	1.13	1.17	1.21	1.23	1.30	1.35	0.51	0.77	1.20	1.90	2.53	3.72	76.2
1-40J0-561- 3236	S	36.0	0.36	0.9	1.13	1.17	1.21	1.23	1.30	1.35	0.60	0.91	1.42	2.25	3.01	4.42	91.4
1-40J0-561- 3248	S	48.0	0.48	1.2	1.13	1.17	1.21	1.23	1.30	1.35	0.79	1.19	1.86	2.96	3.97	5.82	121.9
1-40J0-561- 3260	S	60.0	0.60	1.4	1.13	1.17	1.21	1.23	1.30	1.35	0.97	1.47	2.30	3.68	4.92	7.22	152.4
1-40J0-561- 3272	S	72.0	0.72	1.7	1.13	1.17	1.21	1.23	1.30	1.35	1.15	1.75	2.74	4.39	5.87	8.63	182.9
1-40J0-561- 3284	S	84.0	0.84	1.9	1.13	1.17	1.21	1.23	1.30	1.35	1.33	2.03	3.18	5.10	6.83	10.03	213.4

S = STANDARD LENGTHS MAXIMUM SPECIFICATIONS ARE PRODUCT MAXIMUM INCLUDING MEASURING SYSTEM UNCERTAINTY.

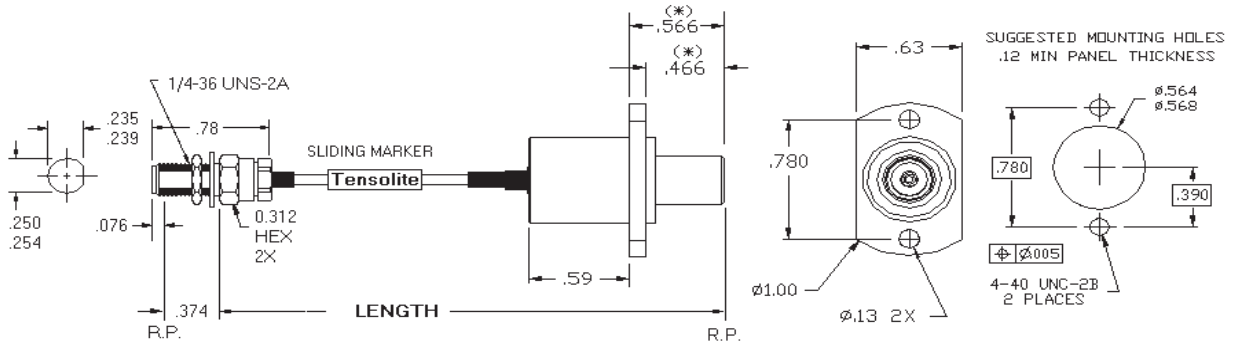
NOTE: PRODUCT SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.
PRODUCT SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CONSULT FACTORY FOR PRODUCT CHARACTERISTICS AT OTHER CONDITIONS.

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TENSOLITE CABLE ASSEMBLY TECHNICAL DATA

SMA FEMALE BULKHEAD TO QBC N PLUG ON 561 Q-FLEX® PLUS CABLE.

NOTE : (*) DIMENSIONS GIVEN ARE REFERENCED AT .030 PRELOAD.



ELECTRICAL SPECIFICATIONS					
IMPEDANCE, NOMINAL:	50 OHMS				
CAPACITANCE NOMINAL:	28.8 pF/FOOT				
RELATIVE SHIELDING:	> -90 db MIN. (1 FT)				
VELOCITY OF PROPAGATION, NOMINAL:	70.5 %				
INSULATION RESISTANCE:	1000 MEGOHMS MIN.				
DIELECTRIC WITHSTANDING VOLTAGE:	1000 VRMS MIN.				
ELECTRICAL DELAY:	1.44 ns/FOOT				
ELECTRICAL DELAY:	120 ps/INCH				
MAX. PULSE RF POWER:	928 WATTS (INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)				
F (IN GHz) ----->	1	2	4	6	12
MAX. CW WATTS ---->	34	24	16	13	9

Patented: US Patent Number 5,746,617 and others.

FEATURES

- : RADIAL FLOAT +/- .025 MAX.
- : LONGITUDINAL FLOAT +.030 MIN AFTER MATING.
- : MATES WITH STANDARD N FEMALE
- : AVAILABLE ONLY ON TENSOLITE CABLE ASSEMBLIES.
- : SERVICE LOOP REQUIRED FOR INSTALLATION
- : 8 INCH MINIMUM LENGTH
- : CONSULT FACTORY FOR ADDITIONAL LENGTHS

MECHANICAL SPECIFICATIONS:	
CABLE MAX. DIAMETER:	0.120 INCHES
MIN. BEND RADIUS:	0.71 INCHES
PREFERRED BEND RADIUS:	1.19 INCHES
CONNECTOR RETENTION:	30 POUNDS MIN.
TEMPERATURE RANGE:	-50 / +85 DEGREES C
FORCE TO ENGAGE QBC:	3 POUNDS NOM.
SMA MATING TORQUE:	7-10 INCH POUNDS
CONNECTOR INTERFACES:	MIL-STD-348

DESCRIPTION	MATERIAL	FINISH OR COLOR
CABLE JACKET:	POLYURETHANE	CLEAR
MARKER:	MIL-I-23053	GRAY
BOOTS:	MIL-I-23053	BLACK
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
SMA BODY:	ASTM A 582 303 STAINLESS STEEL	PASSIVATE PER QQ-P-35
QBC SHELL:	ASTM B16 BRASS	MIL-G-45204 GOLD PLATED
QBC HOUSING:	ASTM A 582 303 STAINLESS STEEL	PASSIVATE PER QQ-P-35
CONTACTS:	ASTM B196 BeCu	MIL-G-45204 GOLD PLATED
INSULATORS:	ASTM D1710 PTFE	NONE
SOLVENTS:	NO OZONE DEPLETING MATERIALS ARE USED	

PART NUMBER		LENGTH INCHES	+ - LENGTH	WEIGHT OUNCES	MAXIMUM VSWR :1 AT FREQUENCY (IN GHz.)						MAXIMUM INSERTION LOSS IN dB AT FREQ. (IN GHz.)						LENGTH CM
					UP TO 1	1 TO 2	2 TO 4	4 TO 6	6 TO 12.4	UP TO 1	1 TO 2	2 TO 4	4 TO 6	6 TO 12.4			
1-40E1-561- 3208	S	8.0	0.25	0.4	1.13	1.17	1.23	1.28	1.35	0.27	0.39	0.61	0.80	1.33	20.3		
1-40E1-561- 3212	S	12.0	0.25	0.5	1.13	1.17	1.23	1.28	1.35	0.36	0.54	0.85	1.12	1.89	30.5		
1-40E1-561- 3218	S	18.0	0.25	0.6	1.13	1.17	1.23	1.28	1.35	0.50	0.76	1.21	1.59	2.71	45.7		
1-40E1-561- 3224	S	24.0	0.25	0.7	1.13	1.17	1.23	1.28	1.35	0.64	0.98	1.56	2.07	3.54	61.0		
1-40E1-561- 3230	S	30.0	0.30	0.8	1.13	1.17	1.23	1.28	1.35	0.78	1.20	1.92	2.55	4.37	76.2		
1-40E1-561- 3236	S	36.0	0.36	0.9	1.13	1.17	1.23	1.28	1.35	0.92	1.42	2.27	3.03	5.20	91.4		
1-40E1-561- 3248	S	48.0	0.48	1.2	1.13	1.17	1.23	1.28	1.35	1.20	1.86	2.98	3.98	6.86	121.9		
1-40E1-561- 3260	S	60.0	0.60	1.4	1.13	1.17	1.23	1.28	1.35	1.48	2.30	3.70	4.93	8.52	152.4		
1-40E1-561- 3272	S	72.0	0.72	1.7	1.13	1.17	1.23	1.28	1.35	1.76	2.74	4.41	5.89	10.18	182.9		
1-40E1-561- 3284	S	84.0	0.84	1.9	1.13	1.17	1.23	1.28	1.35	2.04	3.18	5.12	6.84	11.84	213.4		

S = STANDARD LENGTHS

MAXIMUM SPECIFICATIONS ARE PRODUCT MAXIMUM INCLUDING MEASURING SYSTEM UNCERTAINTY.

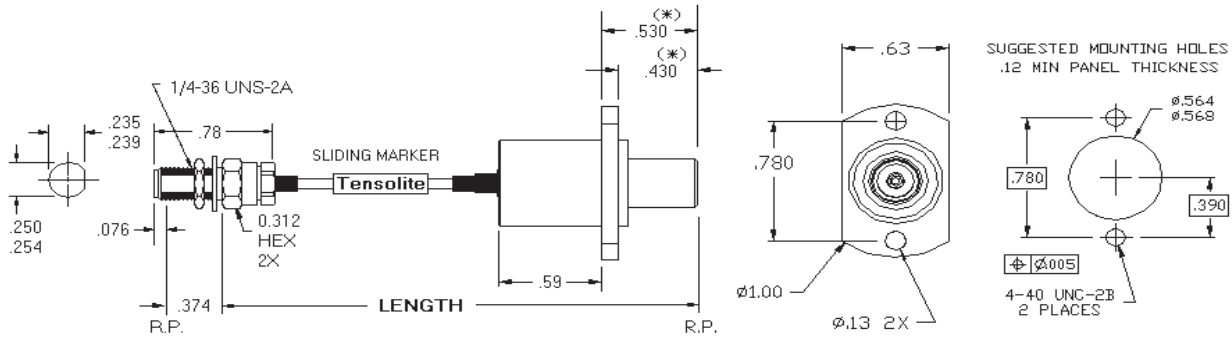
NOTE: PRODUCT SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.

PRODUCT SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CONSULT FACTORY FOR PRODUCT CHARACTERISTICS AT OTHER CONDITIONS.

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NOTE 1 (*) DIMENSIONS GIVEN ARE REFERENCED AT .030 PRELOAD.



ELECTRICAL SPECIFICATIONS	
IMPEDANCE, NOMINAL:	50 OHMS
CAPACITANCE NOMINAL:	28.8 pF/FOOT
RELATIVE SHIELDING:	> -90 db MIN. (1 FT)
VELOCITY OF PROPAGATION, NOMINAL:	70.5 %
INSULATION RESISTANCE:	1000 MEGOHMS MIN.
DIELECTRIC WITHSTANDING VOLTAGE:	1000 VRMS MIN.
ELECTRICAL DELAY:	1.44 ns/FOOT
ELECTRICAL DELAY:	120 ps/INCH
MAX. PULSE RF POWER:	928 WATTS (INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)
F (IN GHz) ----->	1 2 4 6 12
MAX. CW WATTS ---->	34 24 16 13 9

Patented: US Patent Number 5,746,617 and others.

- FEATURES**
- : RADIAL FLOAT +/- .025 MAX.
 - : LONGITUDINAL FLOAT +.030 MIN AFTER MATING.
 - : MATES WITH STANDARD N FEMALE
 - : AVAILABLE ONLY ON TENSOLITE CABLE ASSEMBLIES.
 - : SERVICE LOOP REQUIRED FOR INSTALLATION
 - : 8 INCH MINIMUM LENGTH
 - : CONSULT FACTORY FOR ADDITIONAL LENGTHS
 - : NOTE: STANDARD FREQUENCY FOR A BNC IS 4 GHz

MECHANICAL SPECIFICATIONS:	
CABLE MAX. DIAMETER:	0.120 INCHES
MIN. BEND RADIUS:	0.71 INCHES
PREFERRED BEND RADIUS:	1.19 INCHES
CONNECTOR RETENTION:	30 POUNDS MIN.
TEMPERATURE RANGE:	-50 / +85 DEGREES C
FORCE TO ENGAGE QBC:	3 POUNDS NOM.
SMA MATING TORQUE:	7-10 INCH POUNDS
CONNECTOR INTERFACES:	MIL-STD-348

DESCRIPTION	MATERIAL	FINISH OR COLOR
CABLE JACKET:	POLYURETHANE	CLEAR
MARKER:	MIL-I-23053	GRAY
BOOTS:	MIL-I-23053	BLACK
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
SMA BODY:	ASTM A 582 303 STAINLESS STEEL	PASSIVATE PER QQ-P-35
QBC SHELL:	ASTM B16 BRASS	MIL-G-45204 GOLD PLATED
QBC HOUSING:	ASTM A 582 303 STAINLESS STEEL	PASSIVATE PER QQ-P-35
CONTACTS:	ASTM B196 BeCu	MIL-G-45204 GOLD PLATED
INSULATORS:	ASTM D1710 PTFE	NONE
SOLVENTS:	NO OZONE DEPLETING MATERIALS ARE USED	

PART NUMBER		LENGTH INCHES	+ - LENGTH	WEIGHT OUNCES	MAXIMUM VSWR :1 AT FREQUENCY (IN GHz.)					MAXIMUM INSERTION LOSS IN dB AT FREQ. (IN GHz.)					LENGTH CM
					UP TO 1	1 TO 2	2 TO 4	4 TO 6	6 TO 12.4	UP TO 1	1 TO 2	2 TO 4	4 TO 6	6 TO 12.4	
1-40F1-561- 3208	S	8.0	0.25	0.4	1.13	1.17	1.23	1.28	1.35	0.27	0.39	0.61	0.80	1.33	20.3
1-40F1-561- 3212	S	12.0	0.25	0.5	1.13	1.17	1.23	1.28	1.35	0.36	0.54	0.85	1.12	1.89	30.5
1-40F1-561- 3218	S	18.0	0.25	0.6	1.13	1.17	1.23	1.28	1.35	0.50	0.76	1.21	1.59	2.71	45.7
1-40F1-561- 3224	S	24.0	0.25	0.7	1.13	1.17	1.23	1.28	1.35	0.64	0.98	1.56	2.07	3.54	61.0
1-40F1-561- 3230	S	30.0	0.30	0.8	1.13	1.17	1.23	1.28	1.35	0.78	1.20	1.92	2.55	4.37	76.2
1-40F1-561- 3236	S	36.0	0.36	0.9	1.13	1.17	1.23	1.28	1.35	0.92	1.42	2.27	3.03	5.20	91.4
1-40F1-561- 3248	S	48.0	0.48	1.2	1.13	1.17	1.23	1.28	1.35	1.20	1.86	2.98	3.98	6.86	121.9
1-40F1-561- 3260	S	60.0	0.60	1.4	1.13	1.17	1.23	1.28	1.35	1.48	2.30	3.70	4.93	8.52	152.4
1-40F1-561- 3272	S	72.0	0.72	1.7	1.13	1.17	1.23	1.28	1.35	1.76	2.74	4.41	5.89	10.18	182.9
1-40F1-561- 3284	S	84.0	0.84	1.9	1.13	1.17	1.23	1.28	1.35	2.04	3.18	5.12	6.84	11.84	213.4

S = STANDARD LENGTHS

MAXIMUM SPECIFICATIONS ARE PRODUCT MAXIMUM INCLUDING MEASURING SYSTEM UNCERTAINTY.

NOTE: PRODUCT SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.

PRODUCT SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CONSULT FACTORY FOR PRODUCT CHARACTERISTICS AT OTHER CONDITIONS.

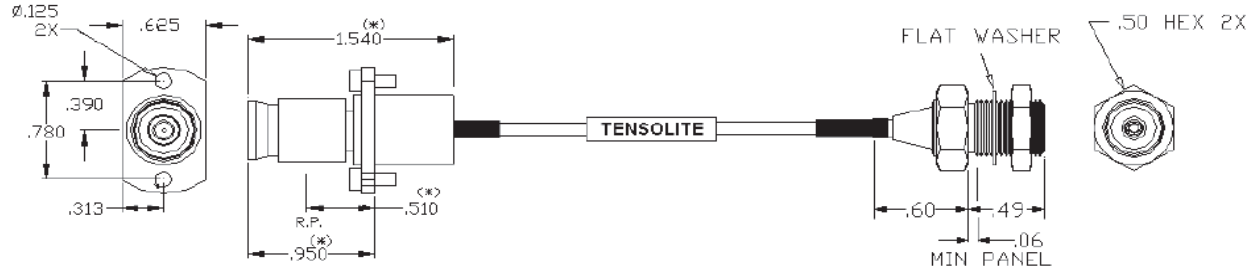
Q-FLEX IS A REGISTERED TRADEMARK OF TENSOLITE CO.

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TENSOLITE CABLE ASSEMBLY TECHNICAL DATA

75 OHM QBC F MALE TO TYPE F B'HD ON 837 Q-FLEX® PLUS CABLE.

NOTE: (*) DIMENSIONS GIVEN ARE REFERENCED AT .030 PRELOAD.



Patented: US Patent Number 5,746,617 and others.

ELECTRICAL SPECIFICATIONS	
IMPEDANCE, NOMINAL:	75 OHMS
CAPACITANCE NOMINAL:	19.2 pF/FOOT
RELATIVE SHIELDING:	-90.0 db MIN.
VELOCITY OF PROPAGATION, NOMINAL:	70.70 %
INSULATION RESISTANCE:	1000 MEGOHMS MIN.
DIELECTRIC WITHSTANDING VOLTAGE:	1000 VRMS MIN.
ELECTRICAL DELAY:	1.44 ns/FOOT
ELECTRICAL DELAY:	120 ps/INCH
MAX. PULSE RF POWER:	500 WATTS (INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)
F (IN GHz) ----->	0.5 1 2 3
MAX. CW WATTS ---->	38 27 19 15

- FEATURES**
- : RADIAL FLOAT +/- .025 MAX.
 - : LONGITUDINAL FLOAT +.030 MIN AFTER MATING.
 - : MATES WITH STANDARD F FEMALE
 - : AVAILABLE ONLY ON TENSOLITE CABLE ASSEMBLIES.
 - : SERVICE LOOP REQUIRED FOR INSTALLATION
 - : 8 INCH MINIMUM LENGTH
 - : CONSULT FACTORY FOR ADDITIONAL LENGTHS

MECHANICAL SPECIFICATIONS:	
CABLE MAX. DIAMETER:	0.115 INCHES
MIN. BEND RADIUS:	0.71 INCHES
PREFERRED BEND RADIUS:	1.19 INCHES
CONNECTOR RETENTION:	30 POUNDS MIN.
TEMPERATURE RANGE:	-40/+85 DEGREES C
FORCE TO ENGAGE QBC:	3.00 INCH POUNDS
CONNECTOR INTERFACE:	QBC: COMMERCIAL TYPE F
BULKHEAD: ACCEPTS MALE PIN DIA. .021 - .031"	

MATERIALS AND FINISHES		
DESCRIPTION	MATERIAL	FINISH OR COLOR
CABLE JACKET:	POLYURETHANE	CLEAR
MARKER:	MIL-I-23053/5	WHITE/BLACK MARKING
BOOTS:	MIL-I-23053/4	BLACK
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
CONTACTS:	ASTM B196 BeCu	MIL-G-45204 GOLD PLATED
INSULATORS:	ASTM D1457 PTFE	NONE
TYPE F BODY:	ASTM B16 BRASS	QQ-N-290 NICKEL PLATED
QBC SHELL	ASTM B16 BRASS	MIL-G-45204 GOLD PLATED
QBC HOUSING	ASTM A 582 303 STAINLESS STEEL	PASSIVATE PER QQ-P-35
SOLVENTS:	NO OZONE DEPLETING MATERIALS ARE USED	

PART NUMBER	LENGTH INCHES	+ - LENGTH	WEIGHT OUNCES	MAXIMUM VSWR :1 AT FREQUENCY (IN GHz.)					MAXIMUM INSERTION LOSS IN dB AT FREQ. (IN GHz.)					LENGTH CM		
				UP TO .5	.5 TO 1	1 TO 2	2 TO 3			UP TO .5	.5 TO 1	1 TO 2	2 TO 3			
1-FOL2-837- 3208	S	8.0	0.25	0.6	1.15	1.20	1.25	1.35			0.29	0.32	0.54	0.66		20.3
1-FOL2-837- 3212	S	12.0	0.25	0.7	1.15	1.20	1.25	1.35			0.35	0.41	0.67	0.81		30.5
1-FOL2-837- 3218	S	18.0	0.25	0.9	1.15	1.20	1.25	1.35			0.44	0.54	0.85	1.05		45.7
1-FOL2-837- 3224	S	24.0	0.25	1.0	1.15	1.20	1.25	1.35			0.53	0.67	1.04	1.28		61.0
1-FOL2-837- 3230	S	30.0	0.25	1.2	1.15	1.20	1.25	1.35			0.62	0.80	1.23	1.51		76.2
1-FOL2-837- 3236	S	36.0	0.25	1.3	1.15	1.20	1.25	1.35			0.71	0.93	1.42	1.74		91.4
1-FOL2-837- 3248	S	48.0	0.25	1.6	1.15	1.20	1.25	1.35			0.90	1.20	1.79	2.21		121.9
1-FOL2-837- 3260	S	60.0	0.25	1.9	1.15	1.20	1.25	1.35			1.08	1.46	2.17	2.67		152.4
1-FOL2-837- 3272	S	72.0	0.25	2.2	1.15	1.20	1.25	1.35			1.26	1.72	2.54	3.13		182.9
1-FOL2-837- 3284	S	84.0	0.25	2.5	1.15	1.20	1.25	1.35			1.45	1.98	2.92	3.60		213.4

S = STANDARD ITEM MAXIMUM SPECIFICATIONS ARE PRODUCT MAXIMUM INCLUDING MEASURING SYSTEM UNCERTAINTY.

NOTE: PRODUCT SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.

PRODUCT SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CONSULT FACTORY FOR PRODUCT CHARACTERISTICS AT OTHER CONDITIONS.

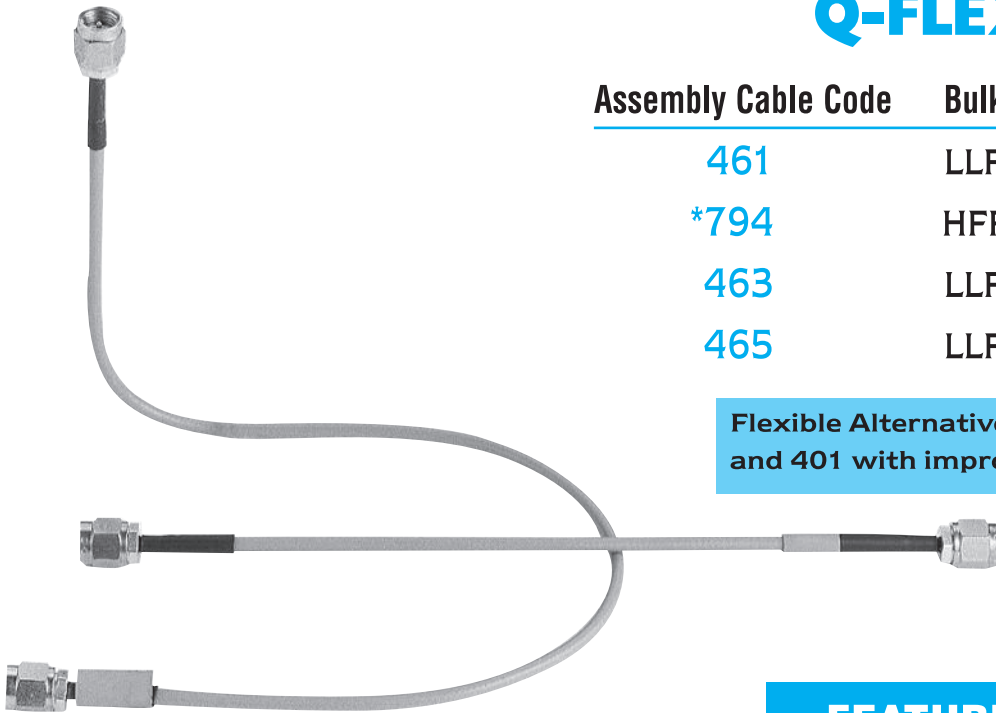
Q-FLEX IS A REGISTERED TRADEMARK OF TENSOLITE CO.

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Q-FLEX® SERIES

Assembly Cable Code	Bulk Cable P/N	OD
461	LLF-1087	.105"
*794	HFF-1087	.105"
463	LLF-1141	.163"
465	LLF-1250	.270"

Flexible Alternatives to RG 405, 402 and 401 with improved attenuation



DESCRIPTION

Q-Flex® assemblies is a unique ALTERNATIVE to custom designed flexible coaxial cables. Traditionally custom specified, these cables are now available in various lengths and deliverable in 24 hours.

There is less than .05dB insertion loss with flexure, so your requirements for a STABLE CABLE are easily maintained.

Q-Flex® utilize Tensolite's anti-torque SMA, SMP or a connector of your choice, thus extending the cables useful life. Now you can meet deadlines, reduce costs, eliminate tooling, ease design, drafting, purchasing and manufacturing with Q-Flex®.

APPLICATIONS

- Meets requirements for low insertion loss
- Low insertion loss with flexure
- Cost sensitive projects
- Quick turn around
- Emergency field replacement
- Replacement for custom designed flexible cables

FEATURES

- Bends easily by hand with minimum degradation
- Low insertion loss with flexure
- Highly flexible FEP cable jacket
- 1/3 the cost of other assemblies
- Eliminates solder joint failures
- Cuts time and costs in design, drafting, purchasing and manufacturing
- Wide assortment IN STOCK for same day to 24 hour delivery
- Equipped with Tensolite's anti-torque SMA for long life
- Many connector configurations
- *794 Low Loss Flexible (high frequency)
 - Up to 40 GHz with 2.92mm (smK) male and straight SMP

Tensolite RF/Microwave Interconnects 1-800-362-FLEX

A CARLISLE Company

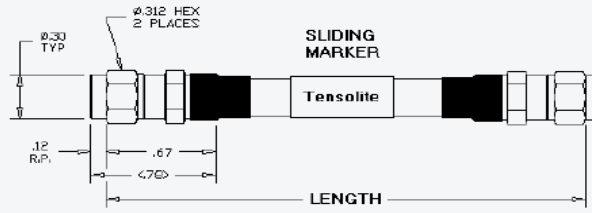
Website: www.tensolite.com

TENSOLITE CABLE ASSEMBLY TECHNICAL DATA

SMA MALE TO SMA MALE ON 465 Q-FLEX® CABLE.

ELECTRICAL SPECIFICATIONS

Table with 2 columns: Specification Name and Value. Includes IMPEDANCE, CAPACITANCE, VELOCITY OF PROPAGATION, RELATIVE SHIELDING, INSULATION RESISTANCE, DIELECTRIC WITHSTANDING VOLTAGE, ELECTRICAL DELAY, MAX. PULSE RF POWER, and MAX. CW WATTS.



MECHANICAL SPECIFICATIONS:

Table with 2 columns: Specification Name and Value. Includes CABLE MAX. DIAMETER, MIN. BEND RADIUS, PREFERRED BEND RADIUS, CONNECTOR RETENTION, TEMPERATURE RANGE, MATING TORQUE, and CONNECTOR INTERFACES.

MATERIALS AND FINISHES

Table with 3 columns: DESCRIPTION, MATERIAL, and FINISH OR COLOR. Lists materials for Cable Jacket, Marker, Boot, Solder, Flux, SMA Body, SMA Nut, SMA Gasket, Solvents, Contacts, and Insulators.

Large data table with columns: ITEM INFORMATION (PART NUMBER), MECHANICAL CHARACTERISTICS (LENGTH, WEIGHT), S11 AND S22 CHARACTERISTICS (MAXIMUM VSWR:1 AT FREQUENCY), and S21 AND S22 CHARACTERISTICS (MAXIMUM INSERTION LOSS IN dB AT FREQ., NOM DELAY). Rows list various part numbers and their performance metrics.

NOTE: PRODUCT VERIFICATION SPECIFICATION IS PRODUCT SPECIFICATION ABOVE PLUS MEASURING SYSTEM UNCERTAINTY AND TEST ADAPTER(S) BELOW CONTRIBUTIONS... PRODUCT SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.

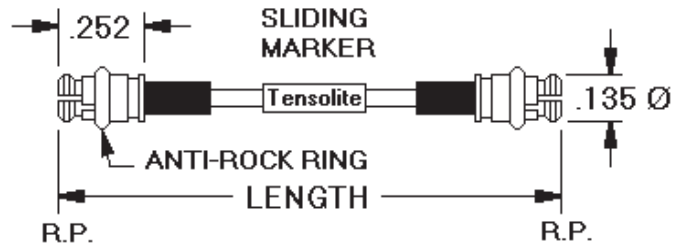
PRODUCT SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CONSULT FACTORY FOR PRODUCT CHARACTERISTICS AT OTHER CONDITIONS. Q-FLEX IS A REGISTERED TRADEMARK OF TENSOLITE CO. VISIT OUR WEB SITE AT http://www.tensolite.com

TENSOLITE CABLE ASSEMBLY TECHNICAL DATA

ELECTRICAL SPECIFICATIONS	
IMPEDANCE, NOMINAL:	50 OHMS
CAPACITANCE NOMINAL:	29.4 pF/FOOT
VELOCITY OF PROPAGATION, NOMINAL:	70.7 %
RELATIVE SHIELDING	-100 dB MIN.
INSULATION RESISTANCE:	1000 MEGOHMS MIN.
DIELECTRIC WITHSTANDING VOLTAGE:	1000 VRMS MIN.
ELECTRICAL DELAY:	1.44 ns/FOOT
ELECTRICAL DELAY:	120 ps/INCH
MAX. PULSE RF POWER:	1250 WATTS
(INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)	
F (IN GHz) ----->	2 4 12 18 26 40
MAX. CW WATTS -->	56 39 21 17 14 11

MECHANICAL SPECIFICATIONS:	
CABLE MAX. DIAMETER:	0.110 INCHES
MIN. BEND RADIUS:	0.55 INCHES
PREFERRED BEND RADIUS:	1.10 INCHES
CONNECTOR RETENTION:	30 POUNDS MIN.
TEMPERATURE RANGE:	-65 / +105 DEGREES C
MATING TORQUE:	7-10 INCH POUNDS
CONNECTOR INTERFACE:	COMMERCIAL SMP

SMP PLUG TO SMP PLUG ON 794 Q-FLEX® CABLE.



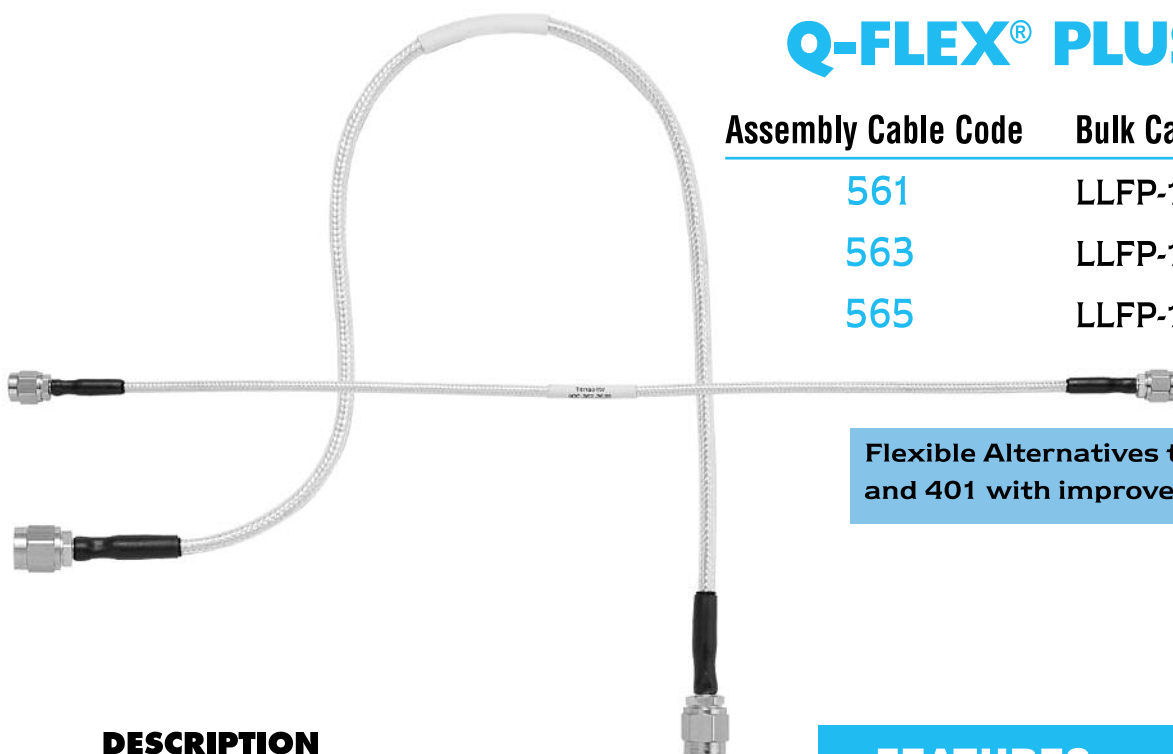
MATERIALS AND FINISHES		
DESCRIPTION	MATERIAL	FINISH OR COLOR
CABLE JACKET:	L-P-389 FEP	BLUE
MARKER:	MIL-I-23053/5	GRAY
BOOT:	MIL-I-23053/4	BLACK
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
CONTACTS:	ASTM-B-196, BeCu	MIL-G-45204 GOLD PLATED
INSULATORS:	ASTM-D-1710, PTFE	NONE
BODIES:	ASTM-B-196, BeCu	MIL-G-45204 GOLD PLATED
SOLVENTS:	NO OZONE DEPLETING MATERIALS ARE USED	

ITEM INFORMATION PART NUMBER	MECHANICAL CHARACTERISTICS			S11 AND S22 CHARACTERISTICS						S21 AND S12 CHARACTERISTICS						NOM DELAY nS	LENGTH CM
	LENGTH INCHES	+ / - LENGTH	WEIGHT OUNCES	MAXIMUM VSWR :1 AT FREQUENCY (IN GHz.)						MAXIMUM INSERTION LOSS IN dB AT FREQ. (IN GHz.)							
				UP TO 2	2 TO 4	4 TO 12	12 TO 18	18 TO 26	26 TO 40	UP TO 2	2 TO 4	4 TO 12	12 TO 18	18 TO 26	26 TO 40		
1-G6G6-794-3302	2.00	0.25	0.2	1.13	1.18	1.25	1.35	1.40	1.45	0.20	0.28	0.47	0.58	0.72	0.91	0.24	5.1
1-G6G6-794-3303	3.00	0.25	0.2	1.13	1.18	1.25	1.35	1.40	1.45	0.23	0.32	0.54	0.67	0.84	1.06	0.36	7.6
1-G6G6-794-3304	4.00	0.25	0.3	1.13	1.18	1.25	1.35	1.40	1.45	0.25	0.36	0.61	0.76	0.95	1.21	0.48	10.2
1-G6G6-794-3305	5.00	0.25	0.3	1.13	1.18	1.25	1.35	1.40	1.45	0.28	0.40	0.69	0.86	1.07	1.36	0.60	12.7
1-G6G6-794-3306	6.00	0.25	0.3	1.13	1.18	1.25	1.35	1.40	1.45	0.31	0.44	0.76	0.95	1.18	1.51	0.72	15.2
1-G6G6-794-3307	7.00	0.25	0.3	1.13	1.18	1.25	1.35	1.40	1.45	0.34	0.48	0.84	1.04	1.30	1.66	0.84	17.8
1-G6G6-794-3308	8.00	0.25	0.3	1.13	1.18	1.25	1.35	1.40	1.45	0.37	0.52	0.91	1.14	1.42	1.81	0.96	20.3
1-G6G6-794-3309	9.00	0.25	0.4	1.13	1.18	1.25	1.35	1.40	1.45	0.39	0.56	0.98	1.23	1.53	1.96	1.08	22.9
1-G6G6-794-3310	10.00	0.25	0.4	1.13	1.18	1.25	1.35	1.40	1.45	0.42	0.60	1.06	1.32	1.65	2.11	1.20	25.4
1-G6G6-794-3311	11.00	0.25	0.4	1.13	1.18	1.25	1.35	1.40	1.45	0.45	0.64	1.13	1.42	1.76	2.26	1.32	27.9
1-G6G6-794-3312	12.00	0.25	0.4	1.13	1.18	1.25	1.35	1.40	1.45	0.48	0.68	1.21	1.51	1.88	2.41	1.44	30.5
1-G6G6-794-3313	13.00	0.25	0.4	1.13	1.18	1.25	1.35	1.40	1.45	0.50	0.72	1.28	1.60	2.00	2.56	1.56	33.0
1-G6G6-794-3314	14.00	0.25	0.5	1.13	1.18	1.25	1.35	1.40	1.45	0.53	0.76	1.35	1.70	2.11	2.71	1.68	35.6
1-G6G6-794-3315	15.00	0.25	0.5	1.13	1.18	1.25	1.35	1.40	1.45	0.56	0.81	1.43	1.79	2.23	2.86	1.80	38.1
1-G6G6-794-3316	16.00	0.25	0.5	1.13	1.18	1.25	1.35	1.40	1.45	0.59	0.85	1.50	1.89	2.34	3.01	1.92	40.6
1-G6G6-794-3317	17.00	0.25	0.5	1.13	1.18	1.25	1.35	1.40	1.45	0.62	0.89	1.58	1.98	2.46	3.16	2.04	43.2
1-G6G6-794-3318	18.00	0.25	0.5	1.13	1.18	1.25	1.35	1.40	1.45	0.64	0.93	1.65	2.07	2.58	3.31	2.16	45.7
1-G6G6-794-3319	19.00	0.25	0.6	1.13	1.18	1.25	1.35	1.40	1.45	0.67	0.97	1.72	2.17	2.69	3.46	2.28	48.3
1-G6G6-794-3320	20.00	0.25	0.6	1.13	1.18	1.25	1.35	1.40	1.45	0.70	1.01	1.80	2.26	2.81	3.61	2.40	50.8
1-G6G6-794-3321	21.00	0.25	0.6	1.13	1.18	1.25	1.35	1.40	1.45	0.73	1.05	1.87	2.35	2.92	3.76	2.52	53.3
1-G6G6-794-3322	22.00	0.25	0.6	1.13	1.18	1.25	1.35	1.40	1.45	0.76	1.09	1.95	2.45	3.04	3.91	2.64	55.9
1-G6G6-794-3323	23.00	0.25	0.7	1.13	1.18	1.25	1.35	1.40	1.45	0.78	1.13	2.02	2.54	3.16	4.06	2.76	58.4
1-G6G6-794-3324	24.00	0.25	0.7	1.13	1.18	1.25	1.35	1.40	1.45	0.81	1.17	2.10	2.63	3.27	4.21	2.88	61.0
1-G6G6-794-3325	25.00	0.25	0.7	1.13	1.18	1.25	1.35	1.40	1.45	0.84	1.21	2.17	2.73	3.39	4.36	3.00	63.5
1-G6G6-794-3326	26.00	0.26	0.7	1.13	1.18	1.25	1.35	1.40	1.45	0.87	1.25	2.24	2.82	3.50	4.51	3.12	66.0
1-G6G6-794-3327	27.00	0.27	0.7	1.13	1.18	1.25	1.35	1.40	1.45	0.89	1.29	2.32	2.91	3.62	4.67	3.24	68.6
1-G6G6-794-3328	28.00	0.28	0.8	1.13	1.18	1.25	1.35	1.40	1.45	0.92	1.33	2.39	3.01	3.74	4.82	3.36	71.1
1-G6G6-794-3329	29.00	0.29	0.8	1.13	1.18	1.25	1.35	1.40	1.45	0.95	1.37	2.47	3.10	3.85	4.97	3.48	73.7
1-G6G6-794-3330	30.00	0.30	0.8	1.13	1.18	1.25	1.35	1.40	1.45	0.98	1.41	2.54	3.19	3.97	5.12	3.60	76.2
1-G6G6-794-3331	31.00	0.31	0.8	1.13	1.18	1.25	1.35	1.40	1.45	1.01	1.45	2.61	3.29	4.08	5.27	3.71	78.7
1-G6G6-794-3332	32.00	0.32	0.8	1.13	1.18	1.25	1.35	1.40	1.45	1.03	1.49	2.69	3.38	4.20	5.42	3.83	81.3
1-G6G6-794-3333	33.00	0.33	0.9	1.13	1.18	1.25	1.35	1.40	1.45	1.06	1.53	2.76	3.47	4.32	5.57	3.95	83.8
1-G6G6-794-3334	34.00	0.34	0.9	1.13	1.18	1.25	1.35	1.40	1.45	1.09	1.57	2.84	3.57	4.43	5.72	4.07	86.4
1-G6G6-794-3335	35.00	0.35	0.9	1.13	1.18	1.25	1.35	1.40	1.45	1.12	1.61	2.91	3.66	4.55	5.87	4.19	88.9
1-G6G6-794-3336	36.00	0.36	0.9	1.16	1.21	1.28	1.38	1.43	1.48	1.15	1.65	2.98	3.76	4.66	6.02	4.31	91.4
1-G6G6-794-3339	39.00	0.39	1.0	1.16	1.21	1.28	1.38	1.43	1.48	1.23	1.77	3.21	4.04	5.01	6.47	4.67	99.1
1-G6G6-794-3340	40.00	0.40	1.0	1.16	1.21	1.28	1.38	1.43	1.48	1.26	1.81	3.28	4.13	5.13	6.62	4.79	101.6
1-G6G6-794-3341	41.00	0.41	1.0	1.16	1.21	1.28	1.38	1.43	1.48	1.28	1.85	3.35	4.22	5.24	6.77	4.91	104.1
1-G6G6-794-3342	42.00	0.42	1.0	1.16	1.21	1.28	1.38	1.43	1.48	1.31	1.89	3.43	4.32	5.36	6.92	5.03	106.7
1-G6G6-794-3348	48.00	0.48	1.2	1.16	1.21	1.28	1.38	1.43	1.48	1.48	2.14	3.87	4.88	6.06	7.82	5.75	121.9

NOTE: PRODUCT SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.
 PRODUCT SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CONSULT FACTORY FOR PRODUCT CHARACTERISTICS AT OTHER CONDITIONS.
 Q-FLEX IS A REGISTERED TRADEMARK OF TENSOLITE CO.
 VISIT OUR WEB SITE AT <http://www.tensolite.com>

Q-Flex and Q-Flex Plus

Q-FLEX® PLUS SERIES



Assembly Cable Code	Bulk Cable P/N	OD
561	LLFP-1087	.115"
563	LLFP-1141	.180"
565	LLFP-1250	.290"

Flexible Alternatives to RG 405, 402 and 401 with improved attenuation

DESCRIPTION

Q-Flex® Plus assemblies offer even greater flexibility for semi-rigid equivalent flexible coax cables. The coax is very flexible, which allows you to bend it in a tight radius without a lot of spring back. As an example, Q-Flex® Plus 561 bend force and spring back properties are only half the amount of standard flexible 405 cable. This makes it great for applications such as missile gimbals, test and measurement devices, that are in tight quarters, and connections to circuit boards in tight locations, that cannot withstand the spring back force of a standard coax.

There is less than .05dB insertion loss with flexure, so your requirements for a stable cable are easily maintained. Stability under vibration is typically less than 0.1dB at 18 Ghz.

Q-Flex® Plus utilizes Tensolite's anti-torque SMA or SMP connectors, thus extending the cables useful life. Now you can meet deadlines, reduce cost, eliminate tooling, ease design, drafting, purchasing and manufacturing with Q-Flex® Plus.

APPLICATIONS

- Meets requirements for low insertion loss
- Low insertion loss with flexure
- Cost sensitive projects
- Quick turn around
- Emergency field replacement
- Replacement for custom designed flexible cables

FEATURES

- Stranded Center Conductor
- Low insertion loss with flexure
- Highly flexible polyurethane cable jacket
- 1/3 the cost of other assemblies
- Eliminates solder joint failures
- Cuts time and costs in design, drafting, purchasing and manufacturing
- Wide assortment IN STOCK for same day to 24 hour delivery
- Equipped with Tensolite's anti-torque SMA, SMP or connector of your choice

Tensolite RF/Microwave Interconnects 1-800-362-FLEX

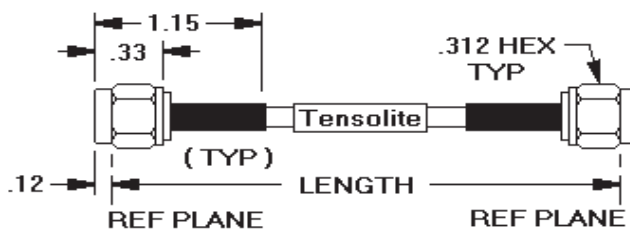
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Website: www.tensolite.com

TENSOLITE CABLE ASSEMBLY TECHNICAL DATA

SMA MALE TO SMA MALE ON 563 Q-FLEX® PLUS CABLE.

ELECTRICAL SPECIFICATIONS						
IMPEDANCE, NOMINAL:	50 OHMS					
CAPACITANCE NOMINAL:	29.4 pf/FOOT					
VELOCITY OF PROPAGATION, NOMINAL:	70.7 %					
RELATIVE SHIELDING:	-100 dB MIN.					
INSULATION RESISTANCE:	1000 MEGOHMS MIN.					
DIELECTRIC WITHSTANDING VOLTAGE:	1000 VRMS MIN.					
ELECTRICAL DELAY:	1.44 ns/FOOT					
ELECTRICAL DELAY:	120 ps/INCH					
MAX. PULSE RF POWER:	1695 WATTS					
(INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)						
F (IN GHz) ----->	1	2	4	6	12	18
MAX. CW WATTS --->	129	62	42	34	23	18



MECHANICAL SPECIFICATIONS:	
CABLE MAX. DIAMETER:	0.180 INCHES
MIN. BEND RADIUS:	0.90 INCHES
PREFERRED BEND RADIUS:	1.80 INCHES
CONNECTOR RETENTION:	60 POUNDS MIN.
TEMPERATURE RANGE:	-50 / +80 DEGREES C
MATING TORQUE:	7-10 INCH POUNDS
CONNECTOR INTERFACES:	MIL-STD-348-310.1

MATERIALS AND FINISHES		
DESCRIPTION	MATERIAL	FINISH OR COLOR
CABLE JACKET:	POLYURETHANE	CLEAR
MARKER:	MIL-I-23053/5	GRAY
BOOT:	MIL-I-23053/4	BLACK
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
SMA CONTACTS:	ASTM-B-196, BeCu	MIL-G-45204 GOLD PLATED
INSULATORS:	ASTM-D-1710, PTFE	NONE
SMA BODY:	ASTM-A-582, 303 STAINLESS STEEL	MIL-G-45204 GOLD PLATED
SMA NUT:	ASTM-A-582, 303 STAINLESS STEEL	MIL-G-45204 GOLD PLATED
SMA GASKET:	ZZ-R-765, SILICON RUBBER	RED
SOLVENTS:	NO OZONE DEPLETING MATERIALS ARE USED	

ITEM INFORMATION PART NUMBER	MECHANICAL CHARACTERISTICS			S11 AND S22 CHARACTERISTICS MAXIMUM VSWR :1 AT FREQUENCY (IN GHz.)							S21 AND S12 CHARACTERISTICS MAXIMUM INSERTION LOSS IN dB AT FREQ. (IN GHz.)						NOM DELAY nS	LENGTH CM
	LENGTH INCHES	+ - LENGTH	WEIGHT OUNCES	UP TO 1	1 TO 2	2 TO 4	4 TO 6	6 TO 12	12 TO 18	UP TO 1	1 TO 2	2 TO 4	4 TO 6	6 TO 12	12 TO 18			
				1-3636-563- 3204	4.0	0.3	0.5	1.07	1.12	1.15	1.18	1.22	1.30	0.10	0.14	0.20		
1-3636-563- 3205	5.0	0.3	0.5	1.07	1.12	1.15	1.18	1.22	1.30	0.11	0.16	0.23	0.28	0.41	0.52	0.60	12.70	
1-3636-563- 3206	6.0	0.25	0.6	1.07	1.12	1.15	1.18	1.22	1.30	0.12	0.18	0.25	0.32	0.46	0.58	0.72	15.2	
1-3636-563- 3207	7.0	0.25	0.6	1.07	1.12	1.15	1.18	1.22	1.30	0.13	0.19	0.28	0.35	0.51	0.64	0.84	17.8	
1-3636-563- 3208	8.0	0.25	0.7	1.07	1.12	1.15	1.18	1.22	1.30	0.15	0.21	0.31	0.38	0.56	0.70	0.96	20.3	
1-3636-563- 3209	9.0	0.25	0.7	1.07	1.12	1.15	1.18	1.22	1.30	0.16	0.23	0.33	0.41	0.61	0.76	1.08	22.9	
1-3636-563- 3210	10.0	0.25	0.8	1.07	1.12	1.15	1.18	1.22	1.30	0.17	0.25	0.36	0.44	0.65	0.83	1.20	25.4	
1-3636-563- 3211	11.0	0.25	0.8	1.07	1.12	1.15	1.18	1.22	1.30	0.18	0.26	0.38	0.48	0.70	0.89	1.32	27.9	
1-3636-563- 3212	12.0	0.25	0.9	1.07	1.12	1.15	1.18	1.22	1.30	0.20	0.28	0.41	0.51	0.75	0.95	1.44	30.5	
1-3636-563- 3213	13.0	0.25	1.0	1.07	1.12	1.15	1.18	1.22	1.30	0.21	0.30	0.43	0.54	0.80	1.01	1.56	33.0	
1-3636-563- 3214	14.0	0.25	1.0	1.07	1.12	1.15	1.18	1.22	1.30	0.22	0.32	0.46	0.57	0.85	1.07	1.68	35.6	
1-3636-563- 3215	15.0	0.25	1.1	1.07	1.12	1.15	1.18	1.22	1.30	0.23	0.33	0.48	0.61	0.89	1.13	1.80	38.1	
1-3636-563- 3216	16.0	0.25	1.1	1.07	1.12	1.15	1.18	1.22	1.30	0.24	0.35	0.51	0.64	0.94	1.19	1.92	40.6	
1-3636-563- 3217	17.0	0.25	1.2	1.07	1.12	1.15	1.18	1.22	1.30	0.26	0.37	0.54	0.67	0.99	1.26	2.04	43.2	
1-3636-563- 3218	18.0	0.25	1.2	1.07	1.12	1.15	1.18	1.22	1.30	0.27	0.39	0.56	0.70	1.04	1.32	2.16	45.7	
1-3636-563- 3219	19.0	0.25	1.3	1.07	1.12	1.15	1.18	1.22	1.30	0.28	0.40	0.59	0.73	1.09	1.38	2.28	48.3	
1-3636-563- 3220	20.0	0.25	1.3	1.07	1.12	1.15	1.18	1.22	1.30	0.29	0.42	0.61	0.77	1.13	1.44	2.40	50.8	
1-3636-563- 3221	21.0	0.25	1.4	1.07	1.12	1.15	1.18	1.22	1.30	0.30	0.44	0.64	0.80	1.18	1.50	2.52	53.3	
1-3636-563- 3222	22.0	0.25	1.4	1.07	1.12	1.15	1.18	1.22	1.30	0.32	0.46	0.66	0.83	1.23	1.56	2.64	55.9	
1-3636-563- 3223	23.0	0.25	1.5	1.07	1.12	1.15	1.18	1.22	1.30	0.33	0.47	0.69	0.86	1.28	1.62	2.76	58.4	
1-3636-563- 3224	24.0	0.25	1.6	1.07	1.12	1.15	1.18	1.22	1.30	0.34	0.49	0.72	0.90	1.33	1.68	2.88	61.0	
1-3636-563- 3225	25.0	0.25	1.6	1.07	1.12	1.15	1.18	1.22	1.30	0.35	0.51	0.74	0.93	1.38	1.75	3.00	63.5	
1-3636-563- 3226	26.0	0.26	1.7	1.07	1.12	1.15	1.18	1.22	1.30	0.36	0.53	0.77	0.96	1.42	1.81	3.12	66.0	
1-3636-563- 3227	27.0	0.27	1.7	1.07	1.12	1.15	1.18	1.22	1.30	0.38	0.54	0.79	0.99	1.47	1.87	3.24	68.6	
1-3636-563- 3228	28.0	0.28	1.8	1.07	1.12	1.15	1.18	1.22	1.30	0.39	0.56	0.82	1.02	1.52	1.93	3.36	71.1	
1-3636-563- 3229	29.0	0.29	1.8	1.07	1.12	1.15	1.18	1.22	1.30	0.40	0.58	0.84	1.06	1.57	1.99	3.48	73.7	
1-3636-563- 3230	30.0	0.30	1.9	1.07	1.12	1.15	1.18	1.22	1.30	0.41	0.60	0.87	1.09	1.62	2.05	3.60	76.2	
1-3636-563- 3233	33.0	0.33	2.0	1.07	1.12	1.15	1.18	1.22	1.30	0.45	0.65	0.95	1.19	1.76	2.24	3.95	83.8	
1-3636-563- 3236	36.0	0.36	2.2	1.07	1.12	1.15	1.18	1.22	1.30	0.49	0.70	1.02	1.28	1.90	2.42	4.31	91.4	
1-3636-563- 3239	39.0	0.39	2.4	1.07	1.12	1.15	1.18	1.22	1.30	0.52	0.75	1.10	1.38	2.05	2.61	4.67	99.1	
1-3636-563- 3242	42.0	0.42	2.5	1.07	1.12	1.15	1.18	1.22	1.30	0.56	0.81	1.18	1.48	2.19	2.79	5.03	107	
1-3636-563- 3245	45.0	0.45	2.7	1.07	1.12	1.15	1.18	1.22	1.30	0.59	0.86	1.25	1.57	2.34	2.97	5.39	114	
1-3636-563- 3248	48.0	0.48	2.9	1.07	1.12	1.15	1.18	1.22	1.30	0.63	0.91	1.33	1.67	2.48	3.16	5.75	122	

MAXIMUM SPECIFICATIONS ARE PRODUCT MAXIMUM

NOTE: PRODUCT VERIFICATION SPECIFICATION IS PRODUCT SPECIFICATION ABOVE PLUS MEASURING SYSTEM UNCERTAINTY AND TEST ADAPTER(S) BELOW

CONTRIBUTIONS ----->	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.04	0.04	0.05	0.08		
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NOTE: PRODUCT SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.

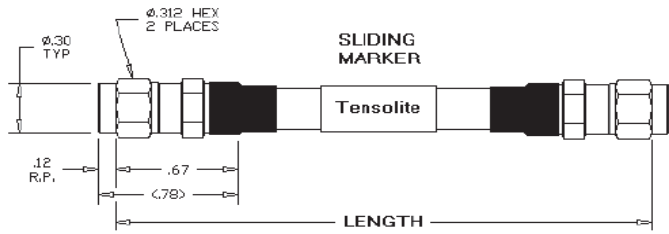
PRODUCT SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CONSULT FACTORY FOR PRODUCT CHARACTERISTICS AT OTHER CONDITIONS.

Q-FLEX IS A REGISTERED TRADEMARK OF TENSOLITE CO.
VISIT OUR WEB SITE AT <http://www.tensolite.com>

TENSOLITE CABLE ASSEMBLY TECHNICAL DATA

SMA MALE TO SMA MALE ON 565 Q-FLEX® PLUS CABLE.

ELECTRICAL SPECIFICATIONS	
IMPEDANCE, NOMINAL:	50 OHMS
CAPACITANCE NOMINAL:	29.4 pF/FOOT
VELOCITY OF PROPAGATION, NOMINAL:	70.7 %
RELATIVE SHIELDING:	-100.0 db MIN.
INSULATION RESISTANCE:	1000 MEGOHMS MIN.
DIELECTRIC WITHSTANDING VOLTAGE:	1500 VRMS MIN.
ELECTRICAL DELAY NOMINAL:	1.44 ns/FOOT
ELECTRICAL DELAY NOMINAL:	120 ps/INCH
MAX. PULSE RF POWER:	3000 WATTS
(INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)	
F (IN GHz) ----->	1 2 4
MAX. CW WATTS -->	208 141 94



MECHANICAL SPECIFICATIONS:	
CABLE MAX. DIAMETER:	0.289 INCHES
MIN. BEND RADIUS:	1.45 INCHES
PREFERRED BEND RADIUS:	2.89 INCHES
CONNECTOR RETENTION:	80 POUNDS MIN.
TEMPERATURE RANGE:	-50 / +85 DEGREES C
MATING TORQUE:	7-10 INCH POUNDS
SMA CONNECTOR INTERFACE:	MIL-STD-348 PAGE 310.3

MATERIALS AND FINISHES		
DESCRIPTION	MATERIAL	FINISH OR COLOR
CABLE JACKET:	POLYURETHANE	CLEAR
MARKER:	MIL-I-23053/5	GRAY
BOOT:	MIL-I-23053/4	BLACK
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
SMA BODY:	ASTM-A-582, 303 STAINLESS STEEL	MIL-G-45204 GOLD PLATED
SMA NUT:	ASTM-A-582, 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
SMA GASKET:	ZZ-R-765, SILICON RUBBER	RED
SOLVENTS:	NO OZONE DEPLETING MATERIALS ARE USED	
CONTACTS:	ASTM-B-196, BeCu	MIL-G-45204 GOLD PLATED
INSULATORS:	ASTM-D-1710, PTFE	NONE

ITEM INFORMATION PART NUMBER	MECHANICAL CHARACTERISTICS			S11 AND S22 CHARACTERISTICS					S21 AND S12 CHARACTERISTICS					LENGTH CM		
	LENGTH INCHES	+ - LENGTH	WEIGHT OUNCES	MAXIMUM VSWR :1 AT FREQUENCY (IN GHz.)					MAXIMUM INSERTION LOSS IN dB AT FREQ. (IN GHz.)						NOM DELAY nS	
				UP TO 1	1 TO 2	2 TO 4				UP TO 1	1 TO 2	2 TO 4				
1-3636-565- 5103	3.00	0.05	0.5	1.10	1.15	1.25				0.10	0.13	0.18			0.36	7.6
1-3636-565- 5104	4.00	0.05	0.7	1.10	1.15	1.25				0.10	0.14	0.19			0.48	10.2
1-3636-565- 5105	5.00	0.05	0.8	1.10	1.15	1.25				0.11	0.15	0.21			0.60	12.7
1-3636-565- 5106	6.00	0.05	0.9	1.10	1.15	1.25				0.12	0.15	0.22			0.72	15.2
1-3636-565- 5107	7.00	0.10	1.0	1.10	1.15	1.25				0.12	0.16	0.23			0.84	17.8
1-3636-565- 5108	8.00	0.10	1.2	1.10	1.15	1.25				0.13	0.17	0.25			0.96	20.3
1-3636-565- 5109	9.00	0.10	1.3	1.10	1.15	1.25				0.13	0.18	0.26			1.08	22.9
1-3636-565- 5110	10.00	0.10	1.4	1.10	1.15	1.25				0.14	0.19	0.27			1.20	25.4
1-3636-565- 5111	11.00	0.10	1.5	1.10	1.15	1.25				0.15	0.20	0.29			1.32	27.9
1-3636-565- 5112	12.00	0.10	1.6	1.10	1.15	1.25				0.15	0.21	0.30			1.44	30.5
1-3636-565- 5113	13.00	0.15	1.8	1.10	1.15	1.25				0.16	0.22	0.31			1.56	33.0
1-3636-565- 5114	14.00	0.15	1.9	1.10	1.15	1.25				0.16	0.22	0.33			1.68	35.6
1-3636-565- 5115	15.00	0.15	2.0	1.10	1.15	1.25				0.17	0.23	0.34			1.80	38.1
1-3636-565- 5116	16.00	0.15	2.1	1.10	1.15	1.25				0.18	0.24	0.35			1.92	40.6
1-3636-565- 5117	17.00	0.15	2.2	1.10	1.15	1.25				0.18	0.25	0.37			2.04	43.2
1-3636-565- 5118	18.00	0.15	2.4	1.10	1.15	1.25				0.19	0.26	0.38			2.16	45.7
1-3636-565- 5119	19.00	0.15	2.5	1.10	1.15	1.25				0.19	0.27	0.39			2.28	48.3
1-3636-565- 5120	20.00	0.15	2.6	1.10	1.15	1.25				0.20	0.28	0.41			2.40	50.8
1-3636-565- 5121	21.00	0.15	2.7	1.10	1.15	1.25				0.21	0.29	0.42			2.52	53.3
1-3636-565- 5122	22.00	0.15	2.8	1.10	1.15	1.25				0.21	0.30	0.43			2.64	55.9
1-3636-565- 5123	23.00	0.15	3.0	1.10	1.15	1.25				0.22	0.30	0.45			2.76	58.4
1-3636-565- 5124	24.00	0.20	3.1	1.10	1.15	1.25				0.22	0.31	0.46			2.88	61.0
1-3636-565- 5125	25.00	0.20	3.2	1.10	1.15	1.25				0.23	0.32	0.47			3.00	63.5
1-3636-565- 5128	28.00	0.20	3.6	1.10	1.15	1.25				0.25	0.35	0.51			3.36	71.1
1-3636-565- 5129	29.00	0.20	3.7	1.10	1.15	1.25				0.25	0.36	0.53			3.48	73.7
1-3636-565- 5131	31.00	0.20	3.9	1.10	1.15	1.25				0.27	0.38	0.55			3.71	78.7
1-3636-565- 5134	34.00	0.20	4.3	1.10	1.15	1.25				0.28	0.40	0.59			4.07	86.4
1-3636-565- 5137	37.00	0.20	4.7	1.10	1.15	1.25				0.30	0.43	0.63			4.43	94.0
1-3636-565- 5140	40.00	0.20	5.0	1.10	1.15	1.25				0.32	0.46	0.67			4.79	101.6
1-3636-565- 5143	43.00	0.20	5.4	1.10	1.15	1.25				0.34	0.48	0.71			5.15	109
1-3636-565- 5146	46.00	0.20	5.8	1.10	1.15	1.25				0.36	0.51	0.75			5.51	117
1-3636-565- 5148	48.00	0.25	6.0	1.10	1.15	1.25				0.37	0.53	0.78			5.75	122

MAXIMUM SPECIFICATIONS ARE PRODUCT MAXIMUM INCLUDING MEASURING SYSTEM UNCERTAINTY.

NOTE: PRODUCT SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.

PRODUCT SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CONSULT FACTORY FOR PRODUCT CHARACTERISTICS AT OTHER CONDITIONS.

Q-FLEX IS A REGISTERED TRADEMARK OF TENSOLITE CO.

VISIT OUR WEB SITE AT <http://www.tensolite.com>

Q-Flex and Q-Flex Plus

SEMI-FLEX® SERIES

Assembly Cable Code	Bulk Cable P/N	OD
604	7-1114-604-18	.047"
600	7-1114-600-18	.087"
601	7-1114-601-18	.141"
606	7-1114-606-18	.250"



DESCRIPTION

SEMI-FLEX® is a unique ALTERNATIVE to the use of semi-rigid coax. A tin filled wire braid outer conductor allows easy flexing and re-bending by hand. A solid copper secondary outer conductor and semi-rigid style core ensure electrical performance comparable to semi-rigid.

No significant electrical degradation occurs when SEMI-FLEX® is formed! The cable retains its' shape, making installations simple. The malleable outer jacket virtually eliminates solder joint failures. Specifying Tensolite's high performance anti-torque SMA remarkably extends the cables' useful life.

Now you can meet deadlines, reduce costs, eliminate tooling, ease design, drafting, purchasing and manufacturing problems all at once with SEMI-FLEX®.

APPLICATIONS

- Replacement for OEM semi-rigid
- RFI and leakage sensitive areas
- Low cost, temporary port extensions
- Breadboarding and design phase
- Emergency field replacement
- Replacement for many flexible cables

FEATURES

- Bends easily by hand with minimum degradation
- Electrical performance comparable to semi-rigid
- 100% shielded, 3 metal outer conductors for low leakage
- Eliminates tooling
- Eliminates solder joint failures
- Cuts time and costs in design, drafting, purchasing and manufacturing
- Wide assortment IN STOCK for same day to 24 hour delivery
- Equipped with Tensolite's anti-torque SMA for long life

Tensolite RF/Microwave Interconnects 1-800-362-FLEX

A CARLISLE Company

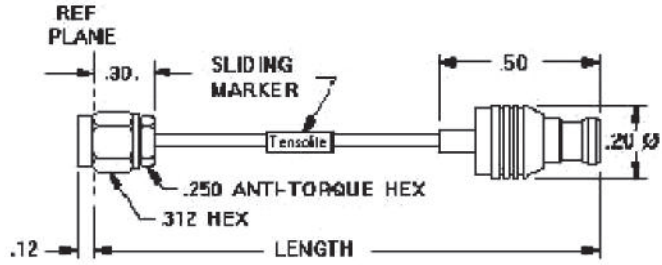
Website: www.tensolite.com

TENSOLITE CABLE ASSEMBLY TECHNICAL DATA

ELECTRICAL SPECIFICATIONS	
IMPEDANCE, NOMINAL:	50 OHMS
CAPACITANCE NOMINAL:	29.40 pF/FOOT
RELATIVE SHIELDING:	70.7 db MIN. (1 FT)
VELOCITY OF PROPAGATION, NOMINAL:	-100 %
INSULATION RESISTANCE:	1000 MEGOHMS MIN.
DIELECTRIC WITHSTANDING VOLTAGE:	1000 VRMS MIN.
ELECTRICAL DELAY:	1.44 ns/FOOT
ELECTRICAL DELAY:	120 ps/INCH
MAX. PULSE RF POWER:	500 WATTS
(INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)	
F (IN GHz) ----->	1 2 4 6
MAX. CW WATTS ---->	32 22 15 13

MECHANICAL SPECIFICATIONS:	
CABLE MAX. DIAMETER:	0.047 INCHES
MIN. BEND RADIUS:	0.13 INCHES
PREFERRED BEND RADIUS:	0.38 INCHES
CONNECTOR RETENTION:	20 POUNDS MIN.
TEMPERATURE RANGE:	-65 / +105 DEGREES C
SMA MATING TORQUE:	7-10 INCH POUNDS
CONNECTOR INTERFACES:	MIL-STD-348 CECC 2220

SMA MALE TO MCX MALE ON 604 SEMI-FLEX® CABLE.



MATERIALS AND FINISHES		
DESCRIPTION	MATERIAL	FINISH OR COLOR
OUTER CONDUCTOR:	HIGH STRENGTH WIRE BRAID	TIN FILLED
MARKER:	MIL-I-23053/5	GRAY
BOOTS:	NONE	BLACK
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
MCX BODY:	ASTM-B-16, BRASS	MIL-G-45204, GOLD PLATED
SMA BODY:	ASTM-A-582, 303 STAINLESS STEEL	QQ-9-35, PASSIVATED
SMA NUT:	ASTM-A-582, 303 STAINLESS STEEL	QQ-P-35, PASSIVATED
SMA CONTACT:	ASTM-B-196, BeCu	MIL-G-45204, GOLD PLATED
INSULATORS:	ASTM-D-1710, PTFE	NONE
SMA GASKET:	ZZ-R-765, SILICON RUBBER	RED
SOLVENTS:	NO OZONE DEPLETING MATERIALS ARE USED	

ITEM INFORMATION PART NUMBER	MECHANICAL CHARACTERISTICS LENGTH INCHES + / - LENGTH WEIGHT OUNCES			S11 AND S22 CHARACTERISTICS						S21 AND S12 CHARACTERISTICS						NOM DELAY nS	LENGTH CM
				MAXIMUM VSWR :1 AT FREQUENCY (IN GHz.)						MAXIMUM INSERTION LOSS IN dB AT FREQ. (IN GHz.)							
				UP TO 1	1 TO 2	2 TO 3	3 TO 4	4 TO 6	UP TO 1	1 TO 2	2 TO 3	3 TO 4	4 TO 6				
1-36M6-604- 5202	2.0	0.05	0.2	1.13	1.17	1.21	1.23	1.30	0.18	0.24	0.29	0.33	0.41	0.24	5.1		
1-36M6-604- 5203	3.0	0.05	0.2	1.13	1.17	1.21	1.23	1.30	0.21	0.28	0.35	0.40	0.50	0.36	7.6		
1-36M6-604- 5204	4.0	0.05	0.2	1.13	1.17	1.21	1.23	1.30	0.24	0.33	0.41	0.47	0.58	0.48	10.2		
1-36M6-604- 5205	5.0	0.05	0.3	1.13	1.17	1.21	1.23	1.30	0.27	0.38	0.47	0.54	0.66	0.60	12.7		
1-36M6-604- 5206	6.0	0.05	0.3	1.13	1.17	1.21	1.23	1.30	0.31	0.43	0.53	0.60	0.74	0.72	15.2		
1-36M6-604- 5207	7.0	0.10	0.3	1.13	1.17	1.21	1.23	1.30	0.34	0.47	0.58	0.67	0.83	0.84	17.8		
1-36M6-604- 5208	8.0	0.10	0.3	1.13	1.17	1.21	1.23	1.30	0.37	0.52	0.64	0.74	0.91	0.96	20.3		
1-36M6-604- 5209	9.0	0.10	0.3	1.13	1.17	1.21	1.23	1.30	0.41	0.57	0.70	0.81	0.99	1.08	22.9		
1-36M6-604- 5210	10.0	0.10	0.3	1.13	1.17	1.21	1.23	1.30	0.44	0.61	0.76	0.87	1.08	1.20	25.4		
1-36M6-604- 5211	11.0	0.10	0.3	1.13	1.17	1.21	1.23	1.30	0.47	0.66	0.82	0.94	1.16	1.32	27.9		
1-36M6-604- 5212	12.0	0.10	0.3	1.13	1.17	1.21	1.23	1.30	0.51	0.71	0.87	1.01	1.24	1.44	30.5		
1-36M6-604- 5213	13.0	0.15	0.3	1.13	1.17	1.21	1.23	1.30	0.54	0.75	0.93	1.07	1.33	1.56	33.0		
1-36M6-604- 5214	14.0	0.15	0.3	1.13	1.17	1.21	1.23	1.30	0.57	0.80	0.99	1.14	1.41	1.68	35.6		
1-36M6-604- 5215	15.0	0.15	0.3	1.13	1.17	1.21	1.23	1.30	0.60	0.85	1.05	1.21	1.49	1.80	38.1		
1-36M6-604- 5216	16.0	0.15	0.3	1.13	1.17	1.21	1.23	1.30	0.64	0.90	1.11	1.28	1.58	1.92	40.6		
1-36M6-604- 5217	17.0	0.15	0.3	1.13	1.17	1.21	1.23	1.30	0.67	0.94	1.16	1.34	1.66	2.04	43.2		
1-36M6-604- 5218	18.0	0.15	0.3	1.13	1.17	1.21	1.23	1.30	0.70	0.99	1.22	1.41	1.74	2.16	45.7		
1-36M6-604- 5219	19.0	0.15	0.3	1.13	1.17	1.21	1.23	1.30	0.74	1.04	1.28	1.48	1.83	2.28	48.3		
1-36M6-604- 5220	20.0	0.15	0.3	1.13	1.17	1.21	1.23	1.30	0.77	1.08	1.34	1.55	1.91	2.40	50.8		
1-36M6-604- 5221	21.0	0.15	0.3	1.13	1.17	1.21	1.23	1.30	0.80	1.13	1.40	1.61	1.99	2.52	53.3		
1-36M6-604- 5222	22.0	0.15	0.3	1.13	1.17	1.21	1.23	1.30	0.83	1.18	1.45	1.68	2.08	2.64	55.9		
1-36M6-604- 5223	23.0	0.15	0.4	1.13	1.17	1.21	1.23	1.30	0.87	1.22	1.51	1.75	2.16	2.76	58.4		
1-36M6-604- 5224	24.0	0.20	0.4	1.13	1.17	1.21	1.23	1.30	0.90	1.27	1.57	1.81	2.24	2.88	61.0		
1-36M6-604- 5227	27.0	0.20	0.4	1.13	1.17	1.21	1.23	1.30	1.00	1.41	1.74	2.02	2.49	3.24	68.6		
1-36M6-604- 5230	30.0	0.20	0.4	1.13	1.17	1.21	1.23	1.30	1.10	1.55	1.92	2.22	2.74	3.60	76.2		
1-36M6-604- 5233	33.0	0.20	0.4	1.13	1.17	1.21	1.23	1.30	1.20	1.69	2.09	2.42	2.99	3.95	83.8		
1-36M6-604- 5236	36.0	0.25	0.4	1.13	1.17	1.21	1.23	1.30	1.30	1.83	2.26	2.62	3.24	4.31	91.4		
1-36M6-604- 5239	39.0	0.25	0.4	1.13	1.17	1.21	1.23	1.30	1.39	1.98	2.44	2.82	3.49	4.67	99.1		
1-36M6-604- 5242	42.0	0.25	0.5	1.13	1.17	1.21	1.23	1.30	1.49	2.12	2.61	3.03	3.74	5.03	106.7		
1-36M6-604- 5245	45.0	0.25	0.5	1.13	1.17	1.21	1.23	1.30	1.59	2.26	2.79	3.23	3.99	5.39	114.3		
1-36M6-604- 5248	48.0	0.30	0.5	1.13	1.17	1.21	1.23	1.30	1.69	2.40	2.96	3.43	4.24	5.75	121.9		

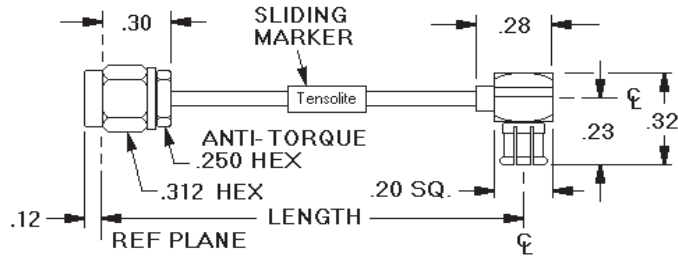
MAXIMUM SPECIFICATIONS ARE PRODUCT MAXIMUM PLUS MEASURING SYSTEM UNCERTAINTY.
 NOTE: PRODUCT SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.
 PRODUCT SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CONSULT FACTORY FOR PRODUCT CHARACTERISTICS AT OTHER CONDITIONS.
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Handformable, Semi-Flex

TENSOLITE CABLE ASSEMBLY TECHNICAL DATA

SMA MALE TO MCX MALE RT.< ON 604 SEMI-FLEX® CABLE.

ELECTRICAL SPECIFICATIONS	
IMPEDANCE, NOMINAL:	50 OHMS
CAPACITANCE NOMINAL:	29.40 pF/FOOT
RELATIVE SHIELDING:	70.7 db MIN. (1 FT)
VELOCITY OF PROPAGATION, NOMINAL:	-100 %
INSULATION RESISTANCE:	1000 MEGOHMS MIN.
DIELECTRIC WITHSTANDING VOLTAGE:	1000 VRMS MIN.
ELECTRICAL DELAY:	1.44 ns/FOOT
ELECTRICAL DELAY:	120 ps/INCH
MAX. PULSE RF POWER:	500 WATTS
(INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)	
F (IN GHz) ----->	1 2 4 6
MAX. CW WATTS ---->	32 22 15 13



MECHANICAL SPECIFICATIONS:	
CABLE MAX. DIAMETER:	0.047 INCHES
MIN. BEND RADIUS:	0.13 INCHES
PREFERRED BEND RADIUS:	0.38 INCHES
CONNECTOR RETENTION:	20 POUNDS MIN.
TEMPERATURE RANGE:	-65 / +105 DEGREES C
SMA MATING TORQUE:	7-10 INCH POUNDS
CONNECTOR INTERFACES:	MIL-STD-348 CECC 2220

MATERIALS AND FINISHES		
DESCRIPTION	MATERIAL	FINISH OR COLOR
OUTER CONDUCTOR:	HIGH STRENGTH WIRE BRAID	TIN FILLED
MARKER:	MIL-I-23053/5	GRAY
BOOTS:	NONE	BLACK
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
MCX BODY:	ASTM-B-16, BRASS	MIL-G-45204, GOLD PLATED
SMA BODY:	ASTM-A-582, 303 STAINLESS STEEL	QQ-9-35, PASSIVATED
SMA NUT:	ASTM-A-582, 303 STAINLESS STEEL	QQ-P-35, PASSIVATED
CONTACTS:	ASTM-B-196, BeCu	MIL-G-45204, GOLD PLATED
INSULATORS:	ASTM-D-1710, PTFE	NONE
SMA GASKET:	ZZ-R-765, SILICON RUBBER	RED
SOLVENTS:	NO OZONE DEPLETING MATERIALS ARE USED	

ITEM INFORMATION PART NUMBER	MECHANICAL CHARACTERISTICS			S11 AND S22 CHARACTERISTICS						S21 AND S12 CHARACTERISTICS						NOM DELAY nS	LENGTH CM
				MAXIMUM VSWR :1 AT FREQUENCY (IN GHz.)						MAXIMUM INSERTION LOSS IN dB AT FREQ. (IN GHz.)							
				UP TO 1	1 TO 2	2 TO 3	3 TO 4	4 TO 6	UP TO 1	1 TO 2	2 TO 3	3 TO 4	4 TO 6				
1-36M7-604- 5202	2.0	0.05	0.2	1.15	1.20	1.25	1.30	1.35	0.18	0.24	0.29	0.33	0.41	0.24	5.1		
1-36M7-604- 5203	3.0	0.05	0.2	1.15	1.20	1.25	1.30	1.35	0.21	0.28	0.35	0.40	0.50	0.36	7.6		
1-36M7-604- 5204	4.0	0.05	0.2	1.15	1.20	1.25	1.30	1.35	0.24	0.33	0.41	0.47	0.58	0.48	10.2		
1-36M7-604- 5205	5.0	0.05	0.3	1.15	1.20	1.25	1.30	1.35	0.27	0.38	0.47	0.54	0.66	0.60	12.7		
1-36M7-604- 5206	6.0	0.05	0.3	1.15	1.20	1.25	1.30	1.35	0.31	0.43	0.53	0.60	0.74	0.72	15.2		
1-36M7-604- 5207	7.0	0.10	0.3	1.15	1.20	1.25	1.30	1.35	0.34	0.47	0.58	0.67	0.83	0.84	17.8		
1-36M7-604- 5208	8.0	0.10	0.3	1.15	1.20	1.25	1.30	1.35	0.37	0.52	0.64	0.74	0.91	0.96	20.3		
1-36M7-604- 5209	9.0	0.10	0.3	1.15	1.20	1.25	1.30	1.35	0.41	0.57	0.70	0.81	0.99	1.08	22.9		
1-36M7-604- 5210	10.0	0.10	0.3	1.15	1.20	1.25	1.30	1.35	0.44	0.61	0.76	0.87	1.08	1.20	25.4		
1-36M7-604- 5211	11.0	0.10	0.3	1.15	1.20	1.25	1.30	1.35	0.47	0.66	0.82	0.94	1.16	1.32	27.9		
1-36M7-604- 5212	12.0	0.10	0.3	1.15	1.20	1.25	1.30	1.35	0.51	0.71	0.87	1.01	1.24	1.44	30.5		
1-36M7-604- 5213	13.0	0.15	0.3	1.15	1.20	1.25	1.30	1.35	0.54	0.75	0.93	1.07	1.33	1.56	33.0		
1-36M7-604- 5214	14.0	0.15	0.3	1.15	1.20	1.25	1.30	1.35	0.57	0.80	0.99	1.14	1.41	1.68	35.6		
1-36M7-604- 5215	15.0	0.15	0.3	1.15	1.20	1.25	1.30	1.35	0.60	0.85	1.05	1.21	1.49	1.80	38.1		
1-36M7-604- 5216	16.0	0.15	0.3	1.15	1.20	1.25	1.30	1.35	0.64	0.90	1.11	1.28	1.58	1.92	40.6		
1-36M7-604- 5217	17.0	0.15	0.3	1.15	1.20	1.25	1.30	1.35	0.67	0.94	1.16	1.34	1.66	2.04	43.2		
1-36M7-604- 5218	18.0	0.15	0.3	1.15	1.20	1.25	1.30	1.35	0.70	0.99	1.22	1.41	1.74	2.16	45.7		
1-36M7-604- 5219	19.0	0.15	0.3	1.15	1.20	1.25	1.30	1.35	0.74	1.04	1.28	1.48	1.83	2.28	48.3		
1-36M7-604- 5220	20.0	0.15	0.3	1.15	1.20	1.25	1.30	1.35	0.77	1.08	1.34	1.55	1.91	2.40	50.8		
1-36M7-604- 5221	21.0	0.15	0.3	1.15	1.20	1.25	1.30	1.35	0.80	1.13	1.40	1.61	1.99	2.52	53.3		
1-36M7-604- 5222	22.0	0.15	0.3	1.15	1.20	1.25	1.30	1.35	0.83	1.18	1.45	1.68	2.08	2.64	55.9		
1-36M7-604- 5223	23.0	0.15	0.4	1.15	1.20	1.25	1.30	1.35	0.87	1.22	1.51	1.75	2.16	2.76	58.4		
1-36M7-604- 5224	24.0	0.20	0.4	1.15	1.20	1.25	1.30	1.35	0.90	1.27	1.57	1.81	2.24	2.88	61.0		
1-36M7-604- 5227	27.0	0.20	0.4	1.15	1.20	1.25	1.30	1.35	1.00	1.41	1.74	2.02	2.49	3.24	68.6		
1-36M7-604- 5230	30.0	0.20	0.4	1.15	1.20	1.25	1.30	1.35	1.10	1.55	1.92	2.22	2.74	3.60	76.2		
1-36M7-604- 5233	33.0	0.20	0.4	1.15	1.20	1.25	1.30	1.35	1.20	1.69	2.09	2.42	2.99	3.95	83.8		
1-36M7-604- 5236	36.0	0.25	0.4	1.15	1.20	1.25	1.30	1.35	1.30	1.83	2.26	2.62	3.24	4.31	91.4		
1-36M7-604- 5239	39.0	0.25	0.4	1.15	1.20	1.25	1.30	1.35	1.39	1.98	2.44	2.82	3.49	4.67	99.1		
1-36M7-604- 5242	42.0	0.25	0.5	1.15	1.20	1.25	1.30	1.35	1.49	2.12	2.61	3.03	3.74	5.03	106.7		
1-36M7-604- 5245	45.0	0.25	0.5	1.15	1.20	1.25	1.30	1.35	1.59	2.26	2.79	3.23	3.99	5.39	114.3		
1-36M7-604- 5248	48.0	0.30	0.5	1.15	1.20	1.25	1.30	1.35	1.69	2.40	2.96	3.43	4.24	5.75	121.9		

MAXIMUM SPECIFICATIONS ARE PRODUCT MAXIMUM PLUS MEASURING SYSTEM UNCERTAINTY.

NOTE: PRODUCT SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.

PRODUCT SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CONSULT FACTORY FOR PRODUCT CHARACTERISTICS AT OTHER CONDITIONS.

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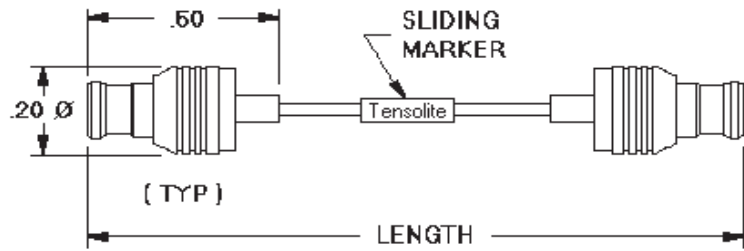
Handformable,
Semi-Flex

TENSOLITE CABLE ASSEMBLY TECHNICAL DATA

ELECTRICAL SPECIFICATIONS	
IMPEDANCE, NOMINAL:	50 OHMS
CAPACITANCE NOMINAL:	28.7 pf/FOOT
RELATIVE SHIELDING:	> -100 db MIN. (1 FT)
VELOCITY OF PROPAGATION, NOMINAL:	70.7 %
INSULATION RESISTANCE:	1000 MEGOHMS MIN.
DIELECTRIC WITHSTANDING VOLTAGE:	1000 VRMS MIN.
ELECTRICAL DELAY:	1.44 ns/FOOT
ELECTRICAL DELAY:	120 ps/INCH
MAX. PULSE RF POWER:	500 WATTS
(INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)	
F (IN GHz) ----->	0.5 1 2 4 6
MAX. CW WATTS ---->	45 33 20 17 13

MECHANICAL SPECIFICATIONS:	
CABLE MAX. DIAMETER:	0.047 INCHES
MIN. BEND RADIUS:	0.13 INCHES
PREFERRED BEND RADIUS:	0.38 INCHES
CONNECTOR RETENTION:	30 POUNDS MIN.
TEMPERATURE RANGE:	-55/+105 DEGREES C
MATING TORQUE:	N/A INCH POUNDS
CONNECTOR INTERFACES:	CECC 2220

MCX MALE TO MCX MALE ON 604 SEMI-FLEX® CABLE.



MATERIALS AND FINISHES		
DESCRIPTION	MATERIAL	FINISH OR COLOR
OUTER CONDUCTOR:	HIGH STRENGTH WIRE BRAID	TIN FILLED
MARKER:	MIL-I-23053/5	GRAY
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
BODIES:	ASTM-B-16, BRASS	MIL-G-45204, GOLD PLATED
CONTACTS:	ASTM-B-196, BeCu	MIL-G-45204, GOLD PLATED
INSULATORS:	ASTM-D-1710, PTFE	NONE
SOLVENTS:	NO OZONE DEPLETING MATERIALS ARE USED	

ITEM INFORMATION PART NUMBER	MECHANICAL CHARACTERISTICS			S11 AND S22 CHARACTERISTICS						S21 AND S12 CHARACTERISTICS						LENGTH CM	
	LENGTH INCHES	+ / - LENGTH	WEIGHT OUNCES	MAXIMUM VSWR :1 AT FREQUENCY (IN GHz.)						MAXIMUM INSERTION LOSS IN dB AT FREQ. (IN GHz.)							NOM DELAY nS
				UP TO 1	1 TO 2	2 TO 3	3 TO 4	4 TO 6	UP TO 1	1 TO 2	2 TO 3	3 TO 4	4 TO 6				
1-M6M6-604- 3202	2.0	0.05	0.3	1.13	1.17	1.21	1.23	1.30	0.20	0.27	0.33	0.37	0.46	0.24	5.1		
1-M6M6-604- 3203	3.0	0.05	0.3	1.13	1.17	1.21	1.23	1.30	0.23	0.31	0.39	0.44	0.54	0.36	7.6		
1-M6M6-604- 3204	4.0	0.05	0.3	1.13	1.17	1.21	1.23	1.30	0.26	0.36	0.44	0.51	0.63	0.48	10.2		
1-M6M6-604- 3205	5.0	0.05	0.3	1.13	1.17	1.21	1.23	1.30	0.29	0.41	0.50	0.58	0.71	0.60	12.7		
1-M6M6-604- 3206	6.0	0.10	0.3	1.13	1.17	1.21	1.23	1.30	0.33	0.45	0.56	0.64	0.79	0.72	15.2		
1-M6M6-604- 3207	7.0	0.10	0.3	1.13	1.17	1.21	1.23	1.30	0.36	0.50	0.62	0.71	0.88	0.84	17.8		
1-M6M6-604- 3208	8.0	0.10	0.3	1.13	1.17	1.21	1.23	1.30	0.39	0.55	0.68	0.78	0.96	0.96	20.3		
1-M6M6-604- 3209	9.0	0.10	0.4	1.13	1.17	1.21	1.23	1.30	0.43	0.59	0.73	0.85	1.04	1.08	22.9		
1-M6M6-604- 3210	10.0	0.10	0.4	1.13	1.17	1.21	1.23	1.30	0.46	0.64	0.79	0.91	1.13	1.20	25.4		
1-M6M6-604- 3211	11.0	0.10	0.4	1.13	1.17	1.21	1.23	1.30	0.49	0.69	0.85	0.98	1.21	1.32	27.9		
1-M6M6-604- 3212	12.0	0.15	0.4	1.13	1.17	1.21	1.23	1.30	0.53	0.74	0.91	1.05	1.29	1.44	30.5		
1-M6M6-604- 3213	13.0	0.15	0.4	1.13	1.17	1.21	1.23	1.30	0.56	0.78	0.97	1.11	1.38	1.56	33.0		
1-M6M6-604- 3214	14.0	0.15	0.4	1.13	1.17	1.21	1.23	1.30	0.59	0.83	1.02	1.18	1.46	1.68	35.6		
1-M6M6-604- 3215	15.0	0.15	0.4	1.13	1.17	1.21	1.23	1.30	0.62	0.88	1.08	1.25	1.54	1.80	38.1		
1-M6M6-604- 3216	16.0	0.15	0.5	1.13	1.17	1.21	1.23	1.30	0.66	0.92	1.14	1.32	1.63	1.92	40.6		
1-M6M6-604- 3217	17.0	0.15	0.5	1.13	1.17	1.21	1.23	1.30	0.69	0.97	1.20	1.38	1.71	2.04	43.2		
1-M6M6-604- 3218	18.0	0.15	0.5	1.13	1.17	1.21	1.23	1.30	0.72	1.02	1.26	1.45	1.79	2.16	45.7		
1-M6M6-604- 3219	19.0	0.15	0.5	1.13	1.17	1.21	1.23	1.30	0.76	1.06	1.31	1.52	1.87	2.28	48.3		
1-M6M6-604- 3220	20.0	0.15	0.5	1.13	1.17	1.21	1.23	1.30	0.79	1.11	1.37	1.59	1.96	2.40	50.8		
1-M6M6-604- 3221	21.0	0.15	0.5	1.13	1.17	1.21	1.23	1.30	0.82	1.16	1.43	1.65	2.04	2.52	53.3		
1-M6M6-604- 3222	22.0	0.15	0.6	1.13	1.17	1.21	1.23	1.30	0.85	1.21	1.49	1.72	2.12	2.64	55.9		
1-M6M6-604- 3223	23.0	0.15	0.6	1.13	1.17	1.21	1.23	1.30	0.89	1.25	1.55	1.79	2.21	2.76	58.4		
1-M6M6-604- 3224	24.0	0.20	0.6	1.13	1.17	1.21	1.23	1.30	0.92	1.30	1.60	1.85	2.29	2.88	61.0		
1-M6M6-604- 3227	27.0	0.20	0.6	1.13	1.17	1.21	1.23	1.30	1.02	1.44	1.78	2.06	2.54	3.24	68.6		
1-M6M6-604- 3230	30.0	0.20	0.7	1.13	1.17	1.21	1.23	1.30	1.12	1.58	1.95	2.26	2.79	3.60	76.2		
1-M6M6-604- 3233	33.0	0.20	0.7	1.13	1.17	1.21	1.23	1.30	1.22	1.72	2.13	2.46	3.04	3.95	83.8		
1-M6M6-604- 3236	36.0	0.25	0.8	1.13	1.17	1.21	1.23	1.30	1.32	1.86	2.30	2.66	3.29	4.31	91.4		
1-M6M6-604- 3239	39.0	0.25	0.8	1.13	1.17	1.21	1.23	1.30	1.41	2.00	2.47	2.86	3.54	4.67	99.1		
1-M6M6-604- 3242	42.0	0.25	0.8	1.13	1.17	1.21	1.23	1.30	1.51	2.15	2.65	3.07	3.79	5.03	106.7		
1-M6M6-604- 3245	45.0	0.25	0.9	1.13	1.17	1.21	1.23	1.30	1.61	2.29	2.82	3.27	4.04	5.39	114.3		
1-M6M6-604- 3248	48.0	0.30	0.9	1.13	1.17	1.21	1.23	1.30	1.71	2.43	2.99	3.47	4.29	5.75	121.9		

MAXIMUM SPECIFICATIONS ARE PRODUCT MAXIMUM PLUS MEASURING SYSTEM UNCERTAINTY.

NOTE: PRODUCT SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.

PRODUCT SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CONSULT FACTORY FOR PRODUCT CHARACTERISTICS AT OTHER CONDITIONS.

SEMI-FLEX IS A REGISTERED TRADEMARK OF TENSOLITE CO.

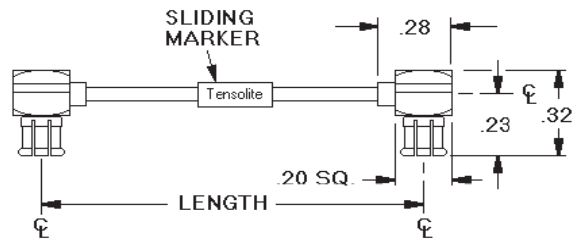
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TENSOLITE CABLE ASSEMBLY TECHNICAL DATA

ELECTRICAL SPECIFICATIONS	
IMPEDANCE, NOMINAL:	50 OHMS
CAPACITANCE NOMINAL:	29.40 pf/FOOT
RELATIVE SHIELDING:	70.7 db MIN. (1 FT)
VELOCITY OF PROPAGATION, NOMINAL:	-100 %
INSULATION RESISTANCE:	1000 MEGOHMS MIN.
DIELECTRIC WITHSTANDING VOLTAGE:	1000 VRMS MIN.
ELECTRICAL DELAY:	1.44 ns/FOOT
ELECTRICAL DELAY:	120 ps/INCH
MAX. PULSE RF POWER:	500 WATTS (INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)
F (IN GHz) ----->	1 2 4 6
MAX. CW WATTS ---->	32 22 15 13

MECHANICAL SPECIFICATIONS:	
CABLE MAX. DIAMETER:	0.047 INCHES
MIN. BEND RADIUS:	0.13 INCHES
PREFERRED BEND RADIUS:	0.38 INCHES
CONNECTOR RETENTION:	20 POUNDS MIN.
TEMPERATURE RANGE:	-65 / +105 DEGREES C
SMA MATING TORQUE:	7-10 INCH POUNDS
CONNECTOR INTERFACES:	CECC 2220

MCX MALE RT.< TO MCX MALE RT.< ON 604 SEMI-FLEX® CABLE.



MATERIALS AND FINISHES		
DESCRIPTION	MATERIAL	FINISH OR COLOR
OUTER CONDUCTOR:	HIGH STRENGTH WIRE BRAID	TIN FILLED
MARKER:	MIL-I-23053/5	GRAY
BOOTS:	NONE	BLACK
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
MCX BODY:	ASTM-B-16, BRASS	MIL-G-45204, GOLD PLATED
CONTACTS:	ASTM-B-196, BeCu	MIL-G-45204, GOLD PLATED
INSULATORS:	ASTM-D-1710, PTFE	NONE
SMA GASKET:	ZZ-R-765, SILICON RUBBER	RED
SOLVENTS:	NO OZONE DEPLETING MATERIALS ARE USED	

ITEM INFORMATION PART NUMBER	MECHANICAL CHARACTERISTICS			S11 AND S22 CHARACTERISTICS MAXIMUM VSWR :1 AT FREQUENCY (IN GHz.)						S21 AND S12 CHARACTERISTICS MAXIMUM INSERTION LOSS IN dB AT FREQ. (IN GHz.)						NOM DELAY nS	LENGTH CM
	LENGTH INCHES	+ / - LENGTH	WEIGHT OUNCES	UP TO 1	1 TO 2	2 TO 3	3 TO 4	4 TO 6	UP TO 1	1 TO 2	2 TO 3	3 TO 4	4 TO 6				
1-M7M7-604- 3202	2.0	0.05	0.2	1.15	1.20	1.25	1.30	1.35	0.18	0.24	0.29	0.33	0.41	0.24	5.1		
1-M7M7-604- 3203	3.0	0.05	0.2	1.15	1.20	1.25	1.30	1.35	0.21	0.28	0.35	0.40	0.50	0.36	7.6		
1-M7M7-604- 3204	4.0	0.05	0.2	1.15	1.20	1.25	1.30	1.35	0.24	0.33	0.41	0.47	0.58	0.48	10.2		
1-M7M7-604- 3205	5.0	0.05	0.3	1.15	1.20	1.25	1.30	1.35	0.27	0.38	0.47	0.54	0.66	0.60	12.7		
1-M7M7-604- 3206	6.0	0.05	0.3	1.15	1.20	1.25	1.30	1.35	0.31	0.43	0.53	0.60	0.74	0.72	15.2		
1-M7M7-604- 3207	7.0	0.10	0.3	1.15	1.20	1.25	1.30	1.35	0.34	0.47	0.58	0.67	0.83	0.84	17.8		
1-M7M7-604- 3208	8.0	0.10	0.3	1.15	1.20	1.25	1.30	1.35	0.37	0.52	0.64	0.74	0.91	0.96	20.3		
1-M7M7-604- 3209	9.0	0.10	0.3	1.15	1.20	1.25	1.30	1.35	0.41	0.57	0.70	0.81	0.99	1.08	22.9		
1-M7M7-604- 3210	10.0	0.10	0.3	1.15	1.20	1.25	1.30	1.35	0.44	0.61	0.76	0.87	1.08	1.20	25.4		
1-M7M7-604- 3211	11.0	0.10	0.3	1.15	1.20	1.25	1.30	1.35	0.47	0.66	0.82	0.94	1.16	1.32	27.9		
1-M7M7-604- 3212	12.0	0.10	0.3	1.15	1.20	1.25	1.30	1.35	0.51	0.71	0.87	1.01	1.24	1.44	30.5		
1-M7M7-604- 3213	13.0	0.15	0.3	1.15	1.20	1.25	1.30	1.35	0.54	0.75	0.93	1.07	1.33	1.56	33.0		
1-M7M7-604- 3214	14.0	0.15	0.3	1.15	1.20	1.25	1.30	1.35	0.57	0.80	0.99	1.14	1.41	1.68	35.6		
1-M7M7-604- 3215	15.0	0.15	0.3	1.15	1.20	1.25	1.30	1.35	0.60	0.85	1.05	1.21	1.49	1.80	38.1		
1-M7M7-604- 3216	16.0	0.15	0.3	1.15	1.20	1.25	1.30	1.35	0.64	0.90	1.11	1.28	1.58	1.92	40.6		
1-M7M7-604- 3217	17.0	0.15	0.3	1.15	1.20	1.25	1.30	1.35	0.67	0.94	1.16	1.34	1.66	2.04	43.2		
1-M7M7-604- 3218	18.0	0.15	0.3	1.15	1.20	1.25	1.30	1.35	0.70	0.99	1.22	1.41	1.74	2.16	45.7		
1-M7M7-604- 3219	19.0	0.15	0.3	1.15	1.20	1.25	1.30	1.35	0.74	1.04	1.28	1.48	1.83	2.28	48.3		
1-M7M7-604- 3220	20.0	0.15	0.3	1.15	1.20	1.25	1.30	1.35	0.77	1.08	1.34	1.55	1.91	2.40	50.8		
1-M7M7-604- 3221	21.0	0.15	0.3	1.15	1.20	1.25	1.30	1.35	0.80	1.13	1.40	1.61	1.99	2.52	53.3		
1-M7M7-604- 3222	22.0	0.15	0.3	1.15	1.20	1.25	1.30	1.35	0.83	1.18	1.45	1.68	2.08	2.64	55.9		
1-M7M7-604- 3223	23.0	0.15	0.4	1.15	1.20	1.25	1.30	1.35	0.87	1.22	1.51	1.75	2.16	2.76	58.4		
1-M7M7-604- 3224	24.0	0.20	0.4	1.15	1.20	1.25	1.30	1.35	0.90	1.27	1.57	1.81	2.24	2.88	61.0		
1-M7M7-604- 3227	27.0	0.20	0.4	1.15	1.20	1.25	1.30	1.35	1.00	1.41	1.74	2.02	2.49	3.24	68.6		
1-M7M7-604- 3230	30.0	0.20	0.4	1.15	1.20	1.25	1.30	1.35	1.10	1.55	1.92	2.22	2.74	3.60	76.2		
1-M7M7-604- 3233	33.0	0.20	0.4	1.15	1.20	1.25	1.30	1.35	1.20	1.69	2.09	2.42	2.99	3.95	83.8		
1-M7M7-604- 3236	36.0	0.25	0.4	1.15	1.20	1.25	1.30	1.35	1.30	1.83	2.26	2.62	3.24	4.31	91.4		
1-M7M7-604- 3239	39.0	0.25	0.4	1.15	1.20	1.25	1.30	1.35	1.39	1.98	2.44	2.82	3.49	4.67	99.1		
1-M7M7-604- 3242	42.0	0.25	0.5	1.15	1.20	1.25	1.30	1.35	1.49	2.12	2.61	3.03	3.74	5.03	106.7		
1-M7M7-604- 3245	45.0	0.25	0.5	1.15	1.20	1.25	1.30	1.35	1.59	2.26	2.79	3.23	3.99	5.39	114.3		
1-M7M7-604- 3248	48.0	0.30	0.5	1.15	1.20	1.25	1.30	1.35	1.69	2.40	2.96	3.43	4.24	5.75	121.9		

MAXIMUM SPECIFICATIONS ARE PRODUCT MAXIMUM PLUS MEASURING SYSTEM UNCERTAINTY.
 NOTE: PRODUCT SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.
 PRODUCT SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CONSULT FACTORY FOR PRODUCT CHARACTERISTICS AT OTHER CONDITIONS.

SEMI-FLEX IS A REGISTERED TRADEMARK OF TENSOLITE CO.

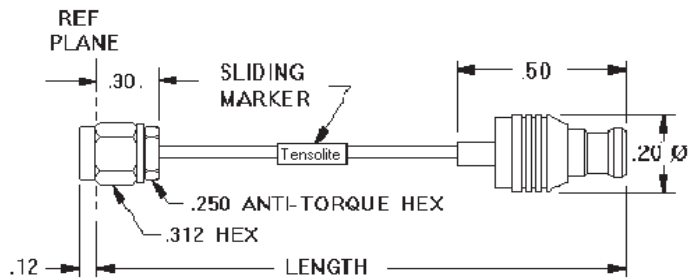
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Handformable,
Semi-Flex

TENSOLITE CABLE ASSEMBLY TECHNICAL DATA

SMA MALE TO MCX MALE ON 600 SEMI-FLEX® CABLE.

ELECTRICAL SPECIFICATIONS	
IMPEDANCE, NOMINAL:	50 OHMS
CAPACITANCE NOMINAL:	29.4 pF/FOOT
RELATIVE SHIELDING:	> -100 db MIN. (1 FT)
VELOCITY OF PROPAGATION, NOMINAL:	70.7 %
INSULATION RESISTANCE:	1000 MEGOHMS MIN.
DIELECTRIC WITHSTANDING VOLTAGE:	1000 VRMS MIN.
ELECTRICAL DELAY:	1.44 ns/FOOT
ELECTRICAL DELAY:	120 ps/INCH
MAX. PULSE RF POWER:	500 WATTS
(INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)	
F (IN GHz) ----->	0.5 1 2 4 6
MAX. CW WATTS ---->	114 79 54 37 30



MECHANICAL SPECIFICATIONS:	
CABLE MAX. DIAMETER:	0.088 INCHES
MIN. BEND RADIUS:	0.13 INCHES
PREFERRED BEND RADIUS:	0.38 INCHES
CONNECTOR RETENTION:	30 POUNDS MIN.
TEMPERATURE RANGE:	-55/+105 DEGREES C
MATING TORQUE:	7-10 INCH POUNDS
CONNECTOR INTERFACES:	MIL-STD-348 CECC 2220

MATERIALS AND FINISHES		
DESCRIPTION	MATERIAL	FINISH OR COLOR
OUTER CONDUCTOR:	HIGH STRENGTH WIRE BRAID	TIN FILLED
MARKER:	MIL-I-23053/5	GRAY
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
MCX BODY:	ASTM-B-16, BRASS	MIL-G-45204, GOLD PLATED
SMA BODY:	ASTM-A-582, 303 STAINLESS STEEL	QQ-9-35, PASSIVATED
SMA NUT:	ASTM-A-582, 303 STAINLESS STEEL	QQ-P-35, PASSIVATED
SMA CONTACT:	ASTM-B-196, BeCu	MIL-G-45204, GOLD PLATED
INSULATORS:	ASTM-D-1710, PTFE	NONE
SMA GASKET:	ZZ-R-765, SILICON RUBBER	RED
SOLVENTS:	NO OZONE DEPLETING MATERIALS ARE USED	

ITEM INFORMATION PART NUMBER	MECHANICAL CHARACTERISTICS			S11 AND S22 CHARACTERISTICS						S21 AND S12 CHARACTERISTICS						NOM DELAY nS	LENGTH CM
	LENGTH INCHES	+ / - LENGTH	WEIGHT OUNCES	MAXIMUM VSWR :1 AT FREQUENCY (IN GHz.)						MAXIMUM INSERTION LOSS IN dB AT FREQ. (IN GHz.)							
				UP TO 1	1 TO 2	2 TO 3	3 TO 4	4 TO 6	UP TO 1	1 TO 2	2 TO 3	3 TO 4	4 TO 6				
1-36M6-600- 5202	2.0	0.25	0.3	1.13	1.17	1.21	1.23	1.30	0.15	0.20	0.25	0.28	0.35	0.24	5.1		
1-36M6-600- 5203	3.0	0.25	0.3	1.13	1.17	1.21	1.23	1.30	0.17	0.23	0.28	0.32	0.40	0.36	7.6		
1-36M6-600- 5204	4.0	0.25	0.3	1.13	1.17	1.21	1.23	1.30	0.19	0.25	0.32	0.36	0.45	0.48	10.2		
1-36M6-600- 5205	5.0	0.25	0.3	1.13	1.17	1.21	1.23	1.30	0.21	0.28	0.35	0.40	0.50	0.60	12.7		
1-36M6-600- 5206	6.0	0.25	0.3	1.13	1.17	1.21	1.23	1.30	0.22	0.31	0.39	0.44	0.55	0.72	15.2		
1-36M6-600- 5207	7.0	0.25	0.3	1.13	1.17	1.21	1.23	1.30	0.24	0.34	0.42	0.48	0.60	0.84	17.8		
1-36M6-600- 5208	8.0	0.25	0.3	1.13	1.17	1.21	1.23	1.30	0.26	0.36	0.45	0.52	0.65	0.96	20.3		
1-36M6-600- 5209	9.0	0.25	0.4	1.13	1.17	1.21	1.23	1.30	0.28	0.39	0.49	0.56	0.70	1.08	22.9		
1-36M6-600- 5210	10.0	0.25	0.4	1.13	1.17	1.21	1.23	1.30	0.30	0.42	0.52	0.60	0.75	1.20	25.4		
1-36M6-600- 5211	11.0	0.25	0.4	1.13	1.17	1.21	1.23	1.30	0.32	0.45	0.56	0.65	0.81	1.32	27.9		
1-36M6-600- 5212	12.0	0.25	0.4	1.13	1.17	1.21	1.23	1.30	0.34	0.47	0.59	0.69	0.86	1.44	30.5		
1-36M6-600- 5213	13.0	0.25	0.4	1.13	1.17	1.21	1.23	1.30	0.36	0.50	0.63	0.73	0.91	1.56	33.0		
1-36M6-600- 5214	14.0	0.25	0.4	1.13	1.17	1.21	1.23	1.30	0.38	0.53	0.66	0.77	0.96	1.68	35.6		
1-36M6-600- 5215	15.0	0.25	0.4	1.13	1.17	1.21	1.23	1.30	0.40	0.56	0.70	0.81	1.01	1.80	38.1		
1-36M6-600- 5216	16.0	0.25	0.5	1.13	1.17	1.21	1.23	1.30	0.41	0.59	0.73	0.85	1.06	1.92	40.6		
1-36M6-600- 5217	17.0	0.25	0.5	1.13	1.17	1.21	1.23	1.30	0.43	0.61	0.76	0.89	1.11	2.04	43.2		
1-36M6-600- 5218	18.0	0.25	0.5	1.13	1.17	1.21	1.23	1.30	0.45	0.64	0.80	0.93	1.16	2.16	45.7		
1-36M6-600- 5219	19.0	0.25	0.5	1.13	1.17	1.21	1.23	1.30	0.47	0.67	0.83	0.97	1.21	2.28	48.3		
1-36M6-600- 5220	20.0	0.25	0.5	1.13	1.17	1.21	1.23	1.30	0.49	0.70	0.87	1.01	1.26	2.40	50.8		
1-36M6-600- 5221	21.0	0.25	0.5	1.13	1.17	1.21	1.23	1.30	0.51	0.72	0.90	1.05	1.31	2.52	53.3		
1-36M6-600- 5222	22.0	0.25	0.6	1.13	1.17	1.21	1.23	1.30	0.53	0.75	0.94	1.09	1.37	2.64	55.9		
1-36M6-600- 5223	23.0	0.25	0.6	1.13	1.17	1.21	1.23	1.30	0.55	0.78	0.97	1.13	1.42	2.76	58.4		
1-36M6-600- 5224	24.0	0.24	0.6	1.13	1.17	1.21	1.23	1.30	0.57	0.81	1.01	1.17	1.47	2.88	61.0		
1-36M6-600- 5227	27.0	0.27	0.6	1.13	1.17	1.21	1.23	1.30	0.62	0.89	1.11	1.29	1.62	3.24	68.6		
1-36M6-600- 5230	30.0	0.30	0.7	1.13	1.17	1.21	1.23	1.30	0.68	0.97	1.21	1.41	1.77	3.60	76.2		
1-36M6-600- 5233	33.0	0.33	0.7	1.13	1.17	1.21	1.23	1.30	0.74	1.05	1.32	1.54	1.92	3.95	83.8		
1-36M6-600- 5236	36.0	0.36	0.8	1.13	1.17	1.21	1.23	1.30	0.80	1.14	1.42	1.66	2.08	4.31	91.4		
1-36M6-600- 5239	39.0	0.39	0.8	1.13	1.17	1.21	1.23	1.30	0.85	1.22	1.52	1.78	2.23	4.67	99.1		
1-36M6-600- 5242	42.0	0.42	0.8	1.13	1.17	1.21	1.23	1.30	0.91	1.30	1.63	1.90	2.38	5.03	106.7		
1-36M6-600- 5245	45.0	0.45	0.9	1.13	1.17	1.21	1.23	1.30	0.97	1.39	1.73	2.02	2.54	5.39	114.3		
1-36M6-600- 5248	48.0	0.48	0.9	1.13	1.17	1.21	1.23	1.30	1.02	1.47	1.83	2.14	2.69	5.75	121.9		

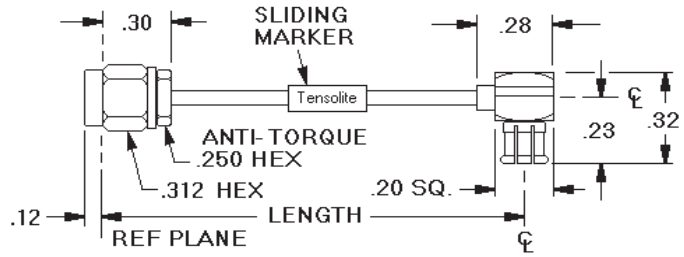
MAXIMUM SPECIFICATIONS ARE PRODUCT MAXIMUM PLUS MEASURING SYSTEM UNCERTAINTY.
 NOTE: PRODUCT SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.
 PRODUCT SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CONSULT FACTORY FOR PRODUCT CHARACTERISTICS AT OTHER CONDITIONS.
 SEMI-FLEX IS A REGISTERED TRADEMARK OF TENSOLITE CO.
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Handformable,
Semi-Flex

TENSOLITE CABLE ASSEMBLY TECHNICAL DATA

ELECTRICAL SPECIFICATIONS	
IMPEDANCE, NOMINAL:	50 OHMS
CAPACITANCE NOMINAL:	29.4 pF/FOOT
RELATIVE SHIELDING:	> -100 db MIN. (1 FT)
VELOCITY OF PROPAGATION, NOMINAL:	70.7 %
INSULATION RESISTANCE:	1000 MEGOHMS MIN.
DIELECTRIC WITHSTANDING VOLTAGE:	1000 VRMS MIN.
ELECTRICAL DELAY:	1.44 ns/FOOT
ELECTRICAL DELAY:	120 ps/INCH
MAX. PULSE RF POWER:	500 WATTS
(INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)	
F (IN GHz) ----->	0.5 1 2 4 6
MAX. CW WATTS ---->	114 79 54 37 30

SMA MALE TO MCX MALE RT.< ON 600 SEMI-FLEX® CABLE.



MATERIALS AND FINISHES

DESCRIPTION	MATERIAL	FINISH OR COLOR
OUTER CONDUCTOR:	HIGH STRENGTH WIRE BRAID	TIN FILLED
MARKER:	MIL-I-23053/5	GRAY
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
MCX BODY:	ASTM-B-16, BRASS	MIL-G-45204, GOLD PLATED
SMA BODY:	ASTM-A-582, 303 STAINLESS STEEL	QQ-9-35, PASSIVATED
SMA NUT:	ASTM-A-582, 303 STAINLESS STEEL	QQ-P-35, PASSIVATED
SMA CONTACT:	ASTM-B-196, BeCu	MIL-G-45204, GOLD PLATED
INSULATORS:	ASTM-D-1710, PTFE	NONE
SMA GASKET:	ZZ-R-765, SILICON RUBBER	RED
SOLVENTS:	NO OZONE DEPLETING MATERIALS ARE USED	

MECHANICAL SPECIFICATIONS:

CABLE MAX. DIAMETER:	0.088 INCHES
MIN. BEND RADIUS:	0.13 INCHES
PREFERRED BEND RADIUS:	0.38 INCHES
CONNECTOR RETENTION:	30 POUNDS MIN.
TEMPERATURE RANGE:	-55/+105 DEGREES C
MATING TORQUE:	7-10 INCH POUNDS
CONNECTOR INTERFACES:	MIL-STD-348 CECC 2220

ITEM INFORMATION PART NUMBER	MECHANICAL CHARACTERISTICS			S11 AND S22 CHARACTERISTICS						S21 AND S12 CHARACTERISTICS						NOM DELAY nS	LENGTH CM
	LENGTH INCHES	+ / - LENGTH	WEIGHT OUNCES	MAXIMUM VSWR :1 AT FREQUENCY (IN GHz.)						MAXIMUM INSERTION LOSS IN dB AT FREQ. (IN GHz.)							
				UP TO 1	1 TO 2	2 TO 3	3 TO 4	4 TO 6	UP TO 1	1 TO 2	2 TO 3	3 TO 4	4 TO 6				
1-36M7-600- 5202	2.0	0.25	0.3	1.13	1.17	1.21	1.23	1.30	0.15	0.20	0.25	0.28	0.35	0.24	5.1		
1-36M7-600- 5203	3.0	0.25	0.3	1.13	1.17	1.21	1.23	1.30	0.17	0.23	0.28	0.32	0.40	0.36	7.6		
1-36M7-600- 5204	4.0	0.25	0.3	1.13	1.17	1.21	1.23	1.30	0.19	0.25	0.32	0.36	0.45	0.48	10.2		
1-36M7-600- 5205	5.0	0.25	0.3	1.13	1.17	1.21	1.23	1.30	0.21	0.28	0.35	0.40	0.50	0.60	12.7		
1-36M7-600- 5206	6.0	0.25	0.3	1.13	1.17	1.21	1.23	1.30	0.22	0.31	0.39	0.44	0.55	0.72	15.2		
1-36M7-600- 5207	7.0	0.25	0.3	1.13	1.17	1.21	1.23	1.30	0.24	0.34	0.42	0.48	0.60	0.84	17.8		
1-36M7-600- 5208	8.0	0.25	0.3	1.13	1.17	1.21	1.23	1.30	0.26	0.36	0.45	0.52	0.65	0.96	20.3		
1-36M7-600- 5209	9.0	0.25	0.4	1.13	1.17	1.21	1.23	1.30	0.28	0.39	0.49	0.56	0.70	1.08	22.9		
1-36M7-600- 5210	10.0	0.25	0.4	1.13	1.17	1.21	1.23	1.30	0.30	0.42	0.52	0.60	0.75	1.20	25.4		
1-36M7-600- 5211	11.0	0.25	0.4	1.13	1.17	1.21	1.23	1.30	0.32	0.45	0.56	0.65	0.81	1.32	27.9		
1-36M7-600- 5212	12.0	0.25	0.4	1.13	1.17	1.21	1.23	1.30	0.34	0.47	0.59	0.69	0.86	1.44	30.5		
1-36M7-600- 5213	13.0	0.25	0.4	1.13	1.17	1.21	1.23	1.30	0.36	0.50	0.63	0.73	0.91	1.56	33.0		
1-36M7-600- 5214	14.0	0.25	0.4	1.13	1.17	1.21	1.23	1.30	0.38	0.53	0.66	0.77	0.96	1.68	35.6		
1-36M7-600- 5215	15.0	0.25	0.4	1.13	1.17	1.21	1.23	1.30	0.40	0.56	0.70	0.81	1.01	1.80	38.1		
1-36M7-600- 5216	16.0	0.25	0.5	1.13	1.17	1.21	1.23	1.30	0.41	0.59	0.73	0.85	1.06	1.92	40.6		
1-36M7-600- 5217	17.0	0.25	0.5	1.13	1.17	1.21	1.23	1.30	0.43	0.61	0.76	0.89	1.11	2.04	43.2		
1-36M7-600- 5218	18.0	0.25	0.5	1.13	1.17	1.21	1.23	1.30	0.45	0.64	0.80	0.93	1.16	2.16	45.7		
1-36M7-600- 5219	19.0	0.25	0.5	1.13	1.17	1.21	1.23	1.30	0.47	0.67	0.83	0.97	1.21	2.28	48.3		
1-36M7-600- 5220	20.0	0.25	0.5	1.13	1.17	1.21	1.23	1.30	0.49	0.70	0.87	1.01	1.26	2.40	50.8		
1-36M7-600- 5221	21.0	0.25	0.5	1.13	1.17	1.21	1.23	1.30	0.51	0.72	0.90	1.05	1.31	2.52	53.3		
1-36M7-600- 5222	22.0	0.25	0.6	1.13	1.17	1.21	1.23	1.30	0.53	0.75	0.94	1.09	1.37	2.64	55.9		
1-36M7-600- 5223	23.0	0.25	0.6	1.13	1.17	1.21	1.23	1.30	0.55	0.78	0.97	1.13	1.42	2.76	58.4		
1-36M7-600- 5224	24.0	0.24	0.6	1.13	1.17	1.21	1.23	1.30	0.57	0.81	1.01	1.17	1.47	2.88	61.0		
1-36M7-600- 5227	27.0	0.27	0.6	1.13	1.17	1.21	1.23	1.30	0.62	0.89	1.11	1.29	1.62	3.24	68.6		
1-36M7-600- 5230	30.0	0.30	0.7	1.13	1.17	1.21	1.23	1.30	0.68	0.97	1.21	1.41	1.77	3.60	76.2		
1-36M7-600- 5233	33.0	0.33	0.7	1.13	1.17	1.21	1.23	1.30	0.74	1.05	1.32	1.54	1.92	3.95	83.8		
1-36M7-600- 5236	36.0	0.36	0.8	1.13	1.17	1.21	1.23	1.30	0.80	1.14	1.42	1.66	2.08	4.31	91.4		
1-36M7-600- 5239	39.0	0.39	0.8	1.13	1.17	1.21	1.23	1.30	0.85	1.22	1.52	1.78	2.23	4.67	99.1		
1-36M7-600- 5242	42.0	0.42	0.8	1.13	1.17	1.21	1.23	1.30	0.91	1.30	1.63	1.90	2.38	5.03	106.7		
1-36M7-600- 5245	45.0	0.45	0.9	1.13	1.17	1.21	1.23	1.30	0.97	1.39	1.73	2.02	2.54	5.39	114.3		
1-36M7-600- 5248	48.0	0.48	0.9	1.13	1.17	1.21	1.23	1.30	1.02	1.47	1.83	2.14	2.69	5.75	121.9		

MAXIMUM SPECIFICATIONS ARE PRODUCT MAXIMUM PLUS MEASURING SYSTEM UNCERTAINTY.

NOTE: PRODUCT SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.

PRODUCT SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CONSULT FACTORY FOR PRODUCT CHARACTERISTICS AT OTHER CONDITIONS.

SEMI-FLEX IS A REGISTERED TRADEMARK OF TENSOLITE CO.

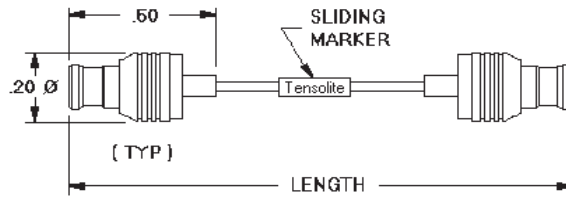
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TENSOLITE CABLE ASSEMBLY TECHNICAL DATA

MCX MALE TO MCX MALE ON 600 SEMI-FLEX® CABLE.

ELECTRICAL SPECIFICATIONS	
IMPEDANCE, NOMINAL:	50 OHMS
CAPACITANCE NOMINAL:	29.4 pF/FOOT
RELATIVE SHIELDING:	> -100 db MIN. (1 FT)
VELOCITY OF PROPAGATION, NOMINAL:	70.7 %
INSULATION RESISTANCE:	1000 MEGOHMS MIN.
DIELECTRIC WITHSTANDING VOLTAGE:	1000 VRMS MIN.
ELECTRICAL DELAY:	1.44 ns/FOOT
ELECTRICAL DELAY:	120 ps/INCH
MAX. PULSE RF POWER:	500 WATTS
(INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)	
F (IN GHZ) ----->	0.5 1 2 4 6
MAX. CW WATTS ---->	114 79 54 37 30

MECHANICAL SPECIFICATIONS:	
CABLE MAX. DIAMETER:	0.088 INCHES
MIN. BEND RADIUS:	0.13 INCHES
PREFERRED BEND RADIUS:	0.38 INCHES
CONNECTOR RETENTION:	30 POUNDS MIN.
TEMPERATURE RANGE:	-55/+105 DEGREES C
MATING TORQUE:	7-10 INCH POUNDS
CONNECTOR INTERFACES:	CECC 2220



MATERIALS AND FINISHES		
DESCRIPTION	MATERIAL	FINISH OR COLOR
OUTER CONDUCTOR:	HIGH STRENGTH WIRE BRAID	TIN FILLED
MARKER:	MIL-I-23053/5	GRAY
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
BODIES:	ASTM-B-16, BRASS	MIL-G-45204, GOLD PLATED
CONTACTS:	ASTM-B-196, BeCu	MIL-G-45204, GOLD PLATED
INSULATORS:	ASTM-D-1710, PTFE	NONE
SOLVENTS:	NO OZONE DEPLETING MATERIALS ARE USED	

ITEM INFORMATION PART NUMBER	MECHANICAL CHARACTERISTICS			S11 AND S22 CHARACTERISTICS MAXIMUM VSWR :1 AT FREQUENCY (IN GHZ.)						S21 AND S12 CHARACTERISTICS MAXIMUM INSERTION LOSS IN dB AT FREQ. (IN GHZ.)						NOM DELAY nS	LENGTH CM
	LENGTH INCHES	+ / - LENGTH	WEIGHT OUNCES	UP TO 1	1 TO 2	2 TO 3	3 TO 4	4 TO 6	UP TO 1	1 TO 2	2 TO 3	3 TO 4	4 TO 6				
1-M6M6-600- 3202	2.0	0.25	0.3	1.13	1.17	1.21	1.23	1.30	0.15	0.20	0.25	0.28	0.35	0.24	5.1		
1-M6M6-600- 3203	3.0	0.25	0.3	1.13	1.17	1.21	1.23	1.30	0.17	0.23	0.28	0.32	0.40	0.36	7.6		
1-M6M6-600- 3204	4.0	0.25	0.3	1.13	1.17	1.21	1.23	1.30	0.19	0.25	0.32	0.36	0.45	0.48	10.2		
1-M6M6-600- 3205	5.0	0.25	0.3	1.13	1.17	1.21	1.23	1.30	0.21	0.28	0.35	0.40	0.50	0.60	12.7		
1-M6M6-600- 3206	6.0	0.25	0.3	1.13	1.17	1.21	1.23	1.30	0.22	0.31	0.39	0.44	0.55	0.72	15.2		
1-M6M6-600- 3207	7.0	0.25	0.3	1.13	1.17	1.21	1.23	1.30	0.24	0.34	0.42	0.48	0.60	0.84	17.8		
1-M6M6-600- 3208	8.0	0.25	0.3	1.13	1.17	1.21	1.23	1.30	0.26	0.36	0.45	0.52	0.65	0.96	20.3		
1-M6M6-600- 3209	9.0	0.25	0.4	1.13	1.17	1.21	1.23	1.30	0.28	0.39	0.49	0.56	0.70	1.08	22.9		
1-M6M6-600- 3210	10.0	0.25	0.4	1.13	1.17	1.21	1.23	1.30	0.30	0.42	0.52	0.60	0.75	1.20	25.4		
1-M6M6-600- 3211	11.0	0.25	0.4	1.13	1.17	1.21	1.23	1.30	0.32	0.45	0.56	0.65	0.81	1.32	27.9		
1-M6M6-600- 3212	12.0	0.25	0.4	1.13	1.17	1.21	1.23	1.30	0.34	0.47	0.59	0.69	0.86	1.44	30.5		
1-M6M6-600- 3213	13.0	0.25	0.4	1.13	1.17	1.21	1.23	1.30	0.36	0.50	0.63	0.73	0.91	1.56	33.0		
1-M6M6-600- 3214	14.0	0.25	0.4	1.13	1.17	1.21	1.23	1.30	0.38	0.53	0.66	0.77	0.96	1.68	35.6		
1-M6M6-600- 3215	15.0	0.25	0.4	1.13	1.17	1.21	1.23	1.30	0.40	0.56	0.70	0.81	1.01	1.80	38.1		
1-M6M6-600- 3216	16.0	0.25	0.5	1.13	1.17	1.21	1.23	1.30	0.41	0.59	0.73	0.85	1.06	1.92	40.6		
1-M6M6-600- 3217	17.0	0.25	0.5	1.13	1.17	1.21	1.23	1.30	0.43	0.61	0.76	0.89	1.11	2.04	43.2		
1-M6M6-600- 3218	18.0	0.25	0.5	1.13	1.17	1.21	1.23	1.30	0.45	0.64	0.80	0.93	1.16	2.16	45.7		
1-M6M6-600- 3219	19.0	0.25	0.5	1.13	1.17	1.21	1.23	1.30	0.47	0.67	0.83	0.97	1.21	2.28	48.3		
1-M6M6-600- 3220	20.0	0.25	0.5	1.13	1.17	1.21	1.23	1.30	0.49	0.70	0.87	1.01	1.26	2.40	50.8		
1-M6M6-600- 3221	21.0	0.25	0.5	1.13	1.17	1.21	1.23	1.30	0.51	0.72	0.90	1.05	1.31	2.52	53.3		
1-M6M6-600- 3222	22.0	0.25	0.6	1.13	1.17	1.21	1.23	1.30	0.53	0.75	0.94	1.09	1.37	2.64	55.9		
1-M6M6-600- 3223	23.0	0.25	0.6	1.13	1.17	1.21	1.23	1.30	0.55	0.78	0.97	1.13	1.42	2.76	58.4		
1-M6M6-600- 3224	24.0	0.24	0.6	1.13	1.17	1.21	1.23	1.30	0.57	0.81	1.01	1.17	1.47	2.88	61.0		
1-M6M6-600- 3227	27.0	0.27	0.6	1.13	1.17	1.21	1.23	1.30	0.62	0.89	1.11	1.29	1.62	3.24	68.6		
1-M6M6-600- 3230	30.0	0.30	0.7	1.13	1.17	1.21	1.23	1.30	0.68	0.97	1.21	1.41	1.77	3.60	76.2		
1-M6M6-600- 3233	33.0	0.33	0.7	1.13	1.17	1.21	1.23	1.30	0.74	1.05	1.32	1.54	1.92	3.95	83.8		
1-M6M6-600- 3236	36.0	0.36	0.8	1.13	1.17	1.21	1.23	1.30	0.80	1.14	1.42	1.66	2.08	4.31	91.4		
1-M6M6-600- 3239	39.0	0.39	0.8	1.13	1.17	1.21	1.23	1.30	0.85	1.22	1.52	1.78	2.23	4.67	99.1		
1-M6M6-600- 3242	42.0	0.42	0.8	1.13	1.17	1.21	1.23	1.30	0.91	1.30	1.63	1.90	2.38	5.03	106.7		
1-M6M6-600- 3245	45.0	0.45	0.9	1.13	1.17	1.21	1.23	1.30	0.97	1.39	1.73	2.02	2.54	5.39	114.3		
1-M6M6-600- 3248	48.0	0.48	0.9	1.13	1.17	1.21	1.23	1.30	1.02	1.47	1.83	2.14	2.69	5.75	121.9		

MAXIMUM SPECIFICATIONS ARE PRODUCT MAXIMUM PLUS MEASURING SYSTEM UNCERTAINTY.

NOTE: PRODUCT SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.

PRODUCT SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CONSULT FACTORY FOR PRODUCT CHARACTERISTICS AT OTHER CONDITIONS.

SEMI-FLEX IS A REGISTERED TRADEMARK OF TENSOLITE CO.

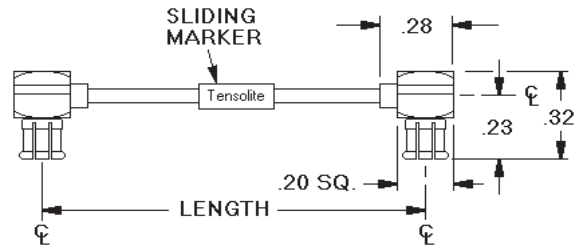
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Handformable,
Semi-Flex

TENSOLITE CABLE ASSEMBLY TECHNICAL DATA

MCX MALE RT.< TO MCX MALE RT.< ON 600 SEMI-FLEX® CABLE.

ELECTRICAL SPECIFICATIONS	
IMPEDANCE, NOMINAL:	50 OHMS
CAPACITANCE NOMINAL:	29.4 pF/FOOT
RELATIVE SHIELDING:	> -100 db MIN. (1 FT)
VELOCITY OF PROPAGATION, NOMINAL:	70.7 %
INSULATION RESISTANCE:	1000 MEGOHMS MIN.
DIELECTRIC WITHSTANDING VOLTAGE:	1000 VRMS MIN.
ELECTRICAL DELAY:	1.44 ns/FOOT
ELECTRICAL DELAY:	120 ps/INCH
MAX. PULSE RF POWER:	500 WATTS
(INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)	
F (IN GHz) ----->	0.5 1 2 4 6
MAX. CW WATTS ---->	114 79 54 37 30



MECHANICAL SPECIFICATIONS:	
CABLE MAX. DIAMETER:	0.088 INCHES
MIN. BEND RADIUS:	0.13 INCHES
PREFERRED BEND RADIUS:	0.38 INCHES
CONNECTOR RETENTION:	30 POUNDS MIN.
TEMPERATURE RANGE:	-55/+105 DEGREES C
MATING TORQUE:	7-10 INCH POUNDS
CONNECTOR INTERFACES:	MIL-STD-348 CECC 2220

MATERIALS AND FINISHES		
DESCRIPTION	MATERIAL	FINISH OR COLOR
OUTER CONDUCTOR:	HIGH STRENGTH WIRE BRAID	TIN FILLED
MARKER:	MIL-I-23053/5	GRAY
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
BODIES:	ASTM-B-16, BRASS	MIL-G-45204, GOLD PLATED
CONTACTS:	ASTM-B-196, BeCu	MIL-G-45204, GOLD PLATED
INSULATORS:	ASTM-D-1710, PTFE	NONE
SOLVENTS:	NO OZONE DEPLETING MATERIALS ARE USED	

ITEM INFORMATION PART NUMBER	MECHANICAL CHARACTERISTICS			S11 AND S22 CHARACTERISTICS					S21 AND S12 CHARACTERISTICS					NOM DELAY nS	LENGTH CM
	LENGTH INCHES	+ / - LENGTH	WEIGHT OUNCES	MAXIMUM VSWR :1 AT FREQUENCY (IN GHz)					MAXIMUM INSERTION LOSS IN dB AT FREQ. (IN GHz.)						
				UP TO 1	1 TO 2	2 TO 3	3 TO 4	4 TO 6	UP TO 1	1 TO 2	2 TO 3	3 TO 4	4 TO 6		
1-M7M7-600- 3202	2.0	0.25	0.3	1.15	1.20	1.25	1.30	1.35	0.15	0.20	0.25	0.28	0.35	0.24	5.1
1-M7M7-600- 3203	3.0	0.25	0.3	1.15	1.20	1.25	1.30	1.35	0.17	0.23	0.28	0.32	0.40	0.36	7.6
1-M7M7-600- 3204	4.0	0.25	0.3	1.15	1.20	1.25	1.30	1.35	0.19	0.25	0.32	0.36	0.45	0.48	10.2
1-M7M7-600- 3205	5.0	0.25	0.3	1.15	1.20	1.25	1.30	1.35	0.21	0.28	0.35	0.40	0.50	0.60	12.7
1-M7M7-600- 3206	6.0	0.25	0.3	1.15	1.20	1.25	1.30	1.35	0.22	0.31	0.39	0.44	0.55	0.72	15.2
1-M7M7-600- 3207	7.0	0.25	0.3	1.15	1.20	1.25	1.30	1.35	0.24	0.34	0.42	0.48	0.60	0.84	17.8
1-M7M7-600- 3208	8.0	0.25	0.3	1.15	1.20	1.25	1.30	1.35	0.26	0.36	0.45	0.52	0.65	0.96	20.3
1-M7M7-600- 3209	9.0	0.25	0.4	1.15	1.20	1.25	1.30	1.35	0.28	0.39	0.49	0.56	0.70	1.08	22.9
1-M7M7-600- 3210	10.0	0.25	0.4	1.15	1.20	1.25	1.30	1.35	0.30	0.42	0.52	0.60	0.75	1.20	25.4
1-M7M7-600- 3211	11.0	0.25	0.4	1.15	1.20	1.25	1.30	1.35	0.32	0.45	0.56	0.65	0.81	1.32	27.9
1-M7M7-600- 3212	12.0	0.25	0.4	1.15	1.20	1.25	1.30	1.35	0.34	0.47	0.59	0.69	0.86	1.44	30.5
1-M7M7-600- 3213	13.0	0.25	0.4	1.15	1.20	1.25	1.30	1.35	0.36	0.50	0.63	0.73	0.91	1.56	33.0
1-M7M7-600- 3214	14.0	0.25	0.4	1.15	1.20	1.25	1.30	1.35	0.38	0.53	0.66	0.77	0.96	1.68	35.6
1-M7M7-600- 3215	15.0	0.25	0.4	1.15	1.20	1.25	1.30	1.35	0.40	0.56	0.70	0.81	1.01	1.80	38.1
1-M7M7-600- 3216	16.0	0.25	0.5	1.15	1.20	1.25	1.30	1.35	0.41	0.59	0.73	0.85	1.06	1.92	40.6
1-M7M7-600- 3217	17.0	0.25	0.5	1.15	1.20	1.25	1.30	1.35	0.43	0.61	0.76	0.89	1.11	2.04	43.2
1-M7M7-600- 3218	18.0	0.25	0.5	1.15	1.20	1.25	1.30	1.35	0.45	0.64	0.80	0.93	1.16	2.16	45.7
1-M7M7-600- 3219	19.0	0.25	0.5	1.15	1.20	1.25	1.30	1.35	0.47	0.67	0.83	0.97	1.21	2.28	48.3
1-M7M7-600- 3220	20.0	0.25	0.5	1.15	1.20	1.25	1.30	1.35	0.49	0.70	0.87	1.01	1.26	2.40	50.8
1-M7M7-600- 3221	21.0	0.25	0.5	1.15	1.20	1.25	1.30	1.35	0.51	0.72	0.90	1.05	1.31	2.52	53.3
1-M7M7-600- 3222	22.0	0.25	0.6	1.15	1.20	1.25	1.30	1.35	0.53	0.75	0.94	1.09	1.37	2.64	55.9
1-M7M7-600- 3223	23.0	0.25	0.6	1.15	1.20	1.25	1.30	1.35	0.55	0.78	0.97	1.13	1.42	2.76	58.4
1-M7M7-600- 3224	24.0	0.24	0.6	1.15	1.20	1.25	1.30	1.35	0.57	0.81	1.01	1.17	1.47	2.88	61.0
1-M7M7-600- 3227	27.0	0.27	0.6	1.15	1.20	1.25	1.30	1.35	0.62	0.89	1.11	1.29	1.62	3.24	68.6
1-M7M7-600- 3230	30.0	0.30	0.7	1.15	1.20	1.25	1.30	1.35	0.68	0.97	1.21	1.41	1.77	3.60	76.2
1-M7M7-600- 3233	33.0	0.33	0.7	1.15	1.20	1.25	1.30	1.35	0.74	1.05	1.32	1.54	1.92	3.95	83.8
1-M7M7-600- 3236	36.0	0.36	0.8	1.15	1.20	1.25	1.30	1.35	0.80	1.14	1.42	1.66	2.08	4.31	91.4
1-M7M7-600- 3239	39.0	0.39	0.8	1.15	1.20	1.25	1.30	1.35	0.85	1.22	1.52	1.78	2.23	4.67	99.1
1-M7M7-600- 3242	42.0	0.42	0.8	1.15	1.20	1.25	1.30	1.35	0.91	1.30	1.63	1.90	2.38	5.03	106.7
1-M7M7-600- 3245	45.0	0.45	0.9	1.15	1.20	1.25	1.30	1.35	0.97	1.39	1.73	2.02	2.54	5.39	114.3
1-M7M7-600- 3248	48.0	0.48	0.9	1.15	1.20	1.25	1.30	1.35	1.02	1.47	1.83	2.14	2.69	5.75	121.9

MAXIMUM SPECIFICATIONS ARE PRODUCT MAXIMUM PLUS MEASURING SYSTEM UNCERTAINTY.
 NOTE: PRODUCT SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.
 PRODUCT SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CONSULT FACTORY FOR PRODUCT CHARACTERISTICS AT OTHER CONDITIONS.
 SEMI-FLEX IS A REGISTERED TRADEMARK OF TENSOLITE CO.
 VISIT OUR WEB SITE AT <http://www.tensolite.com>

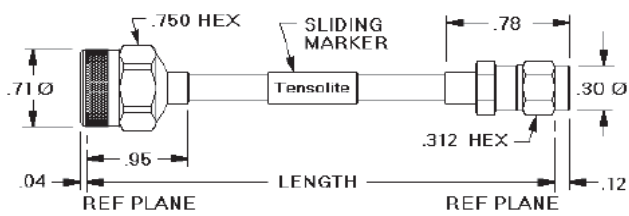
Handformable, Semi-Flex

TENSOLITE CABLE ASSEMBLY TECHNICAL DATA

N MALE TO SMA MALE ON 606 SEMI-FLEX® CABLE.

ELECTRICAL SPECIFICATIONS table with columns for property and value. Properties include Impedance, Capacitance, Velocity of Propagation, Relative Shielding, Insulation Resistance, Dielectric Withstanding Voltage, Electrical Delay, and Max. Pulse RF Power.

MECHANICAL SPECIFICATIONS table with columns for property and value. Properties include Cable Max. Diameter, Min. Bend Radius, Preferred Bend Radius, Connector Retention, Temperature Range, and Mating Torque.



MATERIALS AND FINISHES table with columns: DESCRIPTION, MATERIAL, FINISH OR COLOR. Lists materials for Cable Jacket, Marker, Solder, Flux, Insulators, N Body, N Nut, SMA Body, SMA Nut, SMA Gasket, and Solvents.

Handformable,
Semi-Flex

Large table with columns: ITEM INFORMATION (PART NUMBER), MECHANICAL CHARACTERISTICS (LENGTH, WEIGHT), S11 AND S22 CHARACTERISTICS (MAXIMUM VSWR:1 AT FREQUENCY), S12 AND S21 CHARACTERISTICS (MAXIMUM INSERTION LOSS IN dB AT FREQ.), NOM DELAY nS, and LENGTH CM. Contains rows for various part numbers from 1-1836-606-5104 to 2-1836-606-5130.

D. DISTRIBUTOR ITEM MAXIMUM SPECIFICATIONS ARE PRODUCT MAXIMUM INCLUDING MEASURING SYSTEM UNCERTAINTY.
NOTE: PRODUCT SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.
PRODUCT SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CONSULT FACTORY FOR PRODUCT CHARACTERISTICS AT OTHER CONDITIONS.
SEMI-FLEX IS A REGISTERED TRADEMARK OF TENSOLITE CO.
VISIT OUR WEB SITE AT <http://www.tensolite.com>

SEMI-FLEX® PLUS SERIES

Assembly Cable Code	OD
620	.112"
621	.180"
650	.100"
651	.151"



DESCRIPTION

SEMI-FLEX® “Plus” is a unique **ALTERNATIVE** to the use of semi-rigid coax. SEMI-FLEX® “Plus” enhances Tensolite’s SEMI-FLEX® by using a clear polyurethane jacket over a tin filled wire braid outer conductor. A solid secondary outer conductor and semi-rigid style core ensure electrical performance comparable to semi-rigid. If your application calls for High Temperature, use our SEMI-FLEX® Plus “HIGH TEMPERATURE” 650 or 651 Series (-50 to 200° C) by adding our Blue FEP jacket.

No significant electrical degradation occurs when SEMI-FLEX® “Plus” is formed! The cable retains its’ shape, making installations simple. And the outer jacket now allows the semi-rigid replacement to be used where space and possible shorting considerations prohibit the use of non-insulated cable assemblies. The product is available in standard lengths utilizing Tensolite’s high performance anti-torque SMA.

SEMI-FLEX® “Plus” allows the user to have all the advantages of a hand formable cable and a flexible cable all in one. Eliminate tooling, drafting, purchasing and manufacturing problems all at once with SEMI-FLEX® “Plus”.

APPLICATIONS

- Replacement for OEM semi-rigid
- RFI and leakage sensitive areas
- Low cost, temporary port extensions
- Breadboarding, design and full-scale production phase
- Emergency field replacement
- High Temperature

FEATURES

- Jacketed with a polyurethane insulation or FEP
- Bends easily by hand with minimum degradation
- Electrical performance comparable to semi-rigid
- 100% shielded, 3 metal outer conductors for low leakage
- Eliminates tooling
- Eliminates solder joint failures
- Cuts time and costs in design, drafting, purchasing and manufacturing
- Wide assortment **IN STOCK** for a same day to 24 hour delivery
- Available with crimp SMA plugs or Tensolite’s popular anti-torque SMA plugs

Tensolite RF/Microwave Interconnects 1-800-362-FLEX

A CARLISLE Company

Website: www.tensolite.com

SEMI-FLEX® II SERIES

Assembly Cable Code	OD
617	.086"
618	.141"



DESCRIPTION

Available in .086" and .141" diameter, **SEMI-FLEX®II** is a thin walled, soft aluminum jacketed semi-rigid cable. The more pliable outer conductor allows easier forming than copper jacketed cable while retaining much of the same electrical performance.

SEMI-FLEX®II can be hand shaped for ease of installation and time savings, making this cable an ideal choice for one-time interconnect applications. These assemblies are supplied in the STRAIGHT configuration and are available with both crimp SMA plugs for low cost and direct solder-on SMA plugs for higher reliability and shielding.

Now **SEMI-FLEX®II** along with original, high performance **SEMI-FLEX®** rounds out the designer's options for alternatives to traditional semi-rigid cable assemblies.

APPLICATIONS

- One-time OEM installations
- "Last minute" forming applications
- Low cost products
- Short lead time environments

FEATURES

- Tin plated aluminum outer conductor
- Similar performance to copper jacketed semi-rigid cable
- 50% lower weight than standard semi-rigid
- Won't work harden as quickly as copper
- Low cost, quick delivery
- Available with crimp SMA plugs or Tensolite's popular anti-torque SMA plugs

Tensolite RF/Microwave Interconnects 1-800-362-FLEX

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Website: www.tensolite.com

Workhorse®, Workhorse Plus® & Low Loss Workhorse®

18 & 26.5 GHz Cable Assemblies



DESCRIPTION

The **WORKHORSE®** Family is the result of Tensolite's years of assembly experience coupled with the demand for lower cost products. The **WORKHORSE®** assembly uses the time proven "504" cable, the **WORKHORSE® PLUS** utilizes the "524" cable that provides better flexibility and the **LOW LOSS WORKHORSE®** uses Tensolite's 301 Low Loss cable. All **WORKHORSE®** assemblies utilize our most rugged stainless steel connectors and a new extremely durable yet cost effective attachment method. The **WORKHORSE®** assemblies are extremely durable plus their low price makes the **WORKHORSE®** perfectly suited to today's lower budget.

APPLICATIONS

The **WORKHORSE®** Family is specifically designed for temperature testing, very high volume production lines and strenuous flexing/mating situations that would quickly destroy typical connectors and attachment methods.

- -55°C to +105°C temperature testing
- Very high volume production testing
- Strenuous flexing/mating situations
- Replaces expensive lab test cables

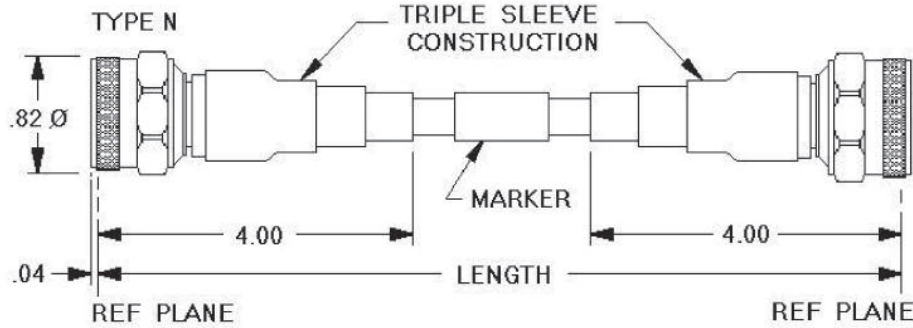
FEATURES

- **NEW, extremely durable** and long lasting connector attachment method
- Uses time-proven materials
- Excellent high frequency response
- Phase stable with flexure
- **DRAMATICALLY** cuts the cost of production test cables
- Standard lengths in stock
- Low Loss Workhorse
 - Low insertion loss
 - Microporous PTFE dielectric
 - Phase stable with flexure

Tensolite RF/Microwave Interconnects 1-800-362-FLEX

A CARLISLE Company

Website: www.tensolite.com



ELECTRICAL SPECIFICATIONS

IMPEDANCE, NOMINAL:	50	OHMS				
CAPACITANCE NOMINAL:	28.8	pf/FOOT				
VELOCITY OF PROPAGATION, NOMINAL:	70.5	%				
RELATIVE SHIELDING:	-100.0	dB MIN.				
INSULATION RESISTANCE:	1000	MEGOHMS MIN.				
DIELECTRIC WITHSTANDING VOLTAGE:	1500	VRMS MIN.				
ELECTRICAL DELAY, NOMINAL:	1.44	ns/FOOT				
ELECTRICAL DELAY, NOMINAL:	120	ps/INCH				
PULSE RF POWER: (INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)	1250	WATTS MAX.				
F (IN GHz) ----->	1	2	4	6	12.4	18
MAX. CW WATTS ----->	50	33	22	17.3	11.4	8.5
PHASE STABILITY DEG.	0.3	0.6	1.2	1.8	3.6	5.4
LOSS STABILITY dB---->	0.01	0.01	0.01	0.015	0.031	0.045
CABLE FORMED AND STRAIGHTENED 90 DEGREES ON A 4" RADIUS						

MATERIALS AND FINISHES

DESCRIPTION	MATERIAL	FINISH OR COLOR
CABLE:	7-1112-524-11	SEE DATA SHEET
CABLE JACKET:	POLYURETHANE	BLACK
MARKER:	MIL-I-23053	WHITE/BLACK MARKING
BOOTS:	MIL-I-23053	BLACK
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
CONTACTS:	ASTM B196 BeCu	MIL-G-45204 GOLD PLATED
INSULATORS:	ASTM D1457 PTFE	NONE
TYPE N BODY:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
TYPE N NUT:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
AVAILABLE GASKET:	ZZ-R-765 SILICON RUBBER	RED
THESE TYPE N CONNECTORS DO NOT HAVE A WEATHER SEALING GASKET. A USER INSTALLED TYPE N GASKET IS AVAILABLE. ORDER GASKET, PART NUMBER 5-1368-100-17 (PKG OF 100).		
SOLVENTS:	NO OZONE DEPLETING MATERIALS ARE USED	

MECHANICAL SPECIFICATIONS:

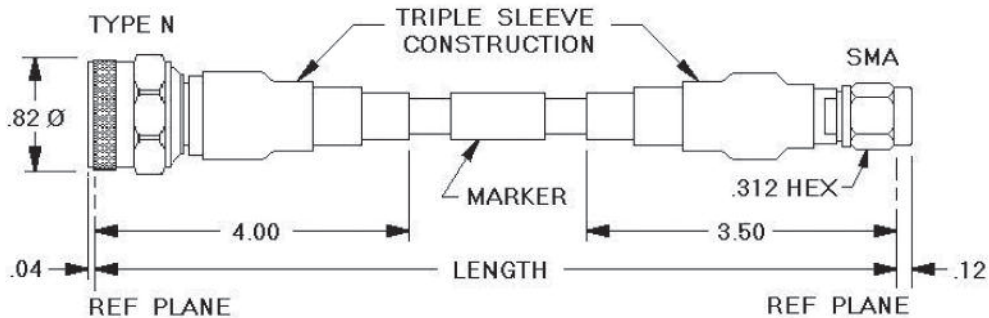
CABLE MAX. DIAMETER:	0.222	INCHES
MINIMUM BEND RADIUS:	4.00	INCHES
CONNECTOR RETENTION:	100	POUNDS MIN.
TEMPERATURE RANGE:	-55 to +85	DEGREES C
MATING TORQUE:	10-15	INCH POUNDS
TYPE N CONNECTOR INTERFACE:	STD-348-402A	SOLID OUTER

PART NUMBER		LENGTH INCHES	+ - LENGTH	WEIGHT OUNCES	MAXIMUM VSWR :1 AT FREQUENCY (IN GHz.)						MAXIMUM INSERTION LOSS IN dB AT FREQ. (IN GHz.)						LENGTH CM
					UP TO 1	1 TO 2	2 TO 4	4 TO 6	6 TO 12.4	12 TO 18	UP TO 1	1 TO 2	2 TO 4	4 TO 6	6 TO 12.4	12 TO 18	
1-1818-524-WH 24	S	24.0	0.25	5.4	1.07	1.12	1.18	1.23	1.28	1.30	0.34	0.45	0.70	0.88	1.36	1.73	61.0
1-1818-524-WH 30	S	30.0	0.30	5.8	1.07	1.12	1.18	1.23	1.28	1.30	0.40	0.54	0.85	1.06	1.64	2.09	76.2
1-1818-524-WH 36	S	36.0	0.36	6.1	1.07	1.12	1.18	1.23	1.28	1.30	0.47	0.64	0.99	1.24	1.92	2.45	91.4
1-1818-524-WH 39	M	39.4	0.39	6.3	1.07	1.12	1.18	1.23	1.28	1.30	0.50	0.69	1.07	1.34	2.08	2.66	100.1
1-1818-524-WH 48	S	48.0	0.48	6.9	1.07	1.12	1.18	1.23	1.28	1.30	0.59	0.83	1.27	1.60	2.48	3.17	121.9
1-1818-524-WH 59	M	59.1	0.59	7.6	1.07	1.12	1.18	1.23	1.28	1.30	0.71	1.00	1.53	1.93	3.00	3.84	150.0
1-1818-524-WH 60	S	60.0	0.60	7.6	1.10	1.15	1.20	1.25	1.30	1.35	0.72	1.02	1.55	1.96	3.05	3.89	152.4
1-1818-524-WH 72	S	72.0	0.72	8.4	1.10	1.15	1.20	1.25	1.30	1.35	0.85	1.21	1.83	2.32	3.61	4.61	182.9
1-1818-524-WH 79	M	78.8	0.79	8.8	1.10	1.15	1.20	1.25	1.30	1.35	0.92	1.31	1.99	2.52	3.93	5.02	200.2
1-1818-524-WH 84	S	84.0	0.84	9.1	1.10	1.15	1.20	1.25	1.30	1.35	0.98	1.40	2.12	2.68	4.18	5.33	213.4
1-1818-524-WH 96	S	96.0	0.96	9.9	1.10	1.15	1.20	1.25	1.30	1.35	1.11	1.58	2.40	3.04	4.74	6.05	243.8
2-1818-524-WH 10		120.0	1.20	11.4	1.12	1.18	1.23	1.28	1.35	1.38	1.37	1.96	2.96	3.76	5.87	7.49	304.8
2-1818-524-WH 12		144.0	1.44	12.9	1.12	1.18	1.23	1.28	1.35	1.38	1.62	2.34	3.53	4.48	7.00	8.93	365.8
2-1818-524-WH 15	D	180.0	1.80	15.2	1.12	1.18	1.23	1.28	1.35	1.38	2.01	2.91	4.38	5.56	8.70	11.09	457.2
2-1818-524-WH 20	D	240.0	2.40	18.9	1.12	1.18	1.23	1.28	1.35	1.38	2.65	3.86	5.79	7.36	11.52	14.69	609.6
2-1818-524-WH 25	D	300.0	3.00	22.7	1.12	1.18	1.23	1.28	1.35	1.38	3.30	4.80	7.20	9.16	14.34	18.30	762.0
2-1818-524-WH 30	D	360.0	3.60	26.4	1.12	1.18	1.23	1.28	1.35	1.38	3.94	5.75	8.61	10.95	17.17	21.90	914.4

1 = INCHES S = STANDARD ITEM MAXIMUM SPECIFICATIONS ARE PRODUCT MAXIMUM INCLUDING MEASURING SYSTEM UNCERTAINTY.
 2 = FEET M = METRIC EQUIVALENT LENGTH

NOTE: PRODUCT SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.
 PRODUCT SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CONSULT FACTORY FOR PRODUCT CHARACTERISTICS AT OTHER CONDITIONS.

SEMI-FLEX IS A REGISTERED TRADEMARK OF TENSOLITE CO.
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ELECTRICAL SPECIFICATIONS						
IMPEDANCE, NOMINAL:	50 OHMS					
CAPACITANCE NOMINAL:	28.8 pf/FOOT					
VELOCITY OF PROPAGATION, NOMINAL:	70.5 %					
RELATIVE SHIELDING:	-100.0 dB MIN.					
INSULATION RESISTANCE:	1000 MEGOHMS MIN.					
DIELECTRIC WITHSTANDING VOLTAGE:	1500 VRMS MIN.					
ELECTRICAL DELAY, NOMINAL:	1.44 ns/FOOT					
ELECTRICAL DELAY, NOMINAL:	120 ps/INCH					
PULSE RF POWER:	1250 WATTS MAX.					
(INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)						
F (IN GHz) ----->	1	2	4	6	12.4	18
MAX. CW WATTS ----->	50	33	22	17.3	11.4	8.50
PHASE STABILITY DEG.	0.3	0.6	1.2	1.8	3.6	5.4
LOSS STABILITY dB---->	0.01	0.01	0.01	0.015	0.031	0.045
CABLE FORMED AND STRAIGHTENED 90 DEGREES ON A 4" RADIUS						

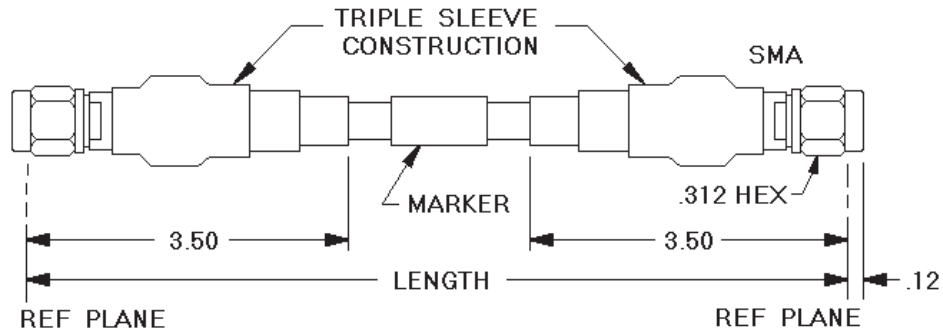
MECHANICAL SPECIFICATIONS:	
CABLE MAX. DIAMETER:	0.222 INCHES
MINIMUM BEND RADIUS:	4.00 INCHES
CONNECTOR RETENTION:	100 POUNDS MIN.
TEMPERATURE RANGE:	-55 to +85 DEGREES C
MATING TORQUE:	7-10 SMA, 10-15 N INCH POUNDS
CONNECTOR INTERFACES:	MIL-STD-348 N=SOLID OUTER

MATERIALS AND FINISHES		
DESCRIPTION	MATERIAL	FINISH OR COLOR
CABLE:	7-1112-524-11	SEE DATA SHEET
CABLE JACKET:	POLYURETHANE	BLACK
MARKER:	MIL-I-23053	WHITE/BLACK MARKING
BOOTS:	MIL-I-23053	BLACK
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
CONTACTS:	ASTM B196 BeCu	MIL-G-45204 GOLD PLATED
INSULATORS:	ASTM D1457 PTFE	NONE
TYPE N BODY:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
TYPE N NUT:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
SMA BODY:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
SMA NUT:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
SMA GASKET:	ZZ-R-765 SILICON RUBBER	RED
THE TYPE N CONNECTOR DOES NOT HAVE A WEATHER SEALING GASKET. A USER INSTALLED TYPE N GASKET IS AVAILABLE. ORDER GASKET, PART NUMBER 5-1368-100-17 (PKG OF 100).		
SOLVENTS:	NO OZONE DEPLETING MATERIALS ARE USED	

PART NUMBER		LENGTH INCHES	+ - LENGTH	MAX. WEIGHT OUNCES	MAXIMUM VSWR :1 AT FREQUENCY (IN GHz.)						MAXIMUM INSERTION LOSS IN dB AT FREQ. (IN GHz.)						LENGTH CM
					UP TO 1	1 TO 2	2 TO 4	4 TO 6	6 TO 12.4	12 TO 18	UP TO 1	1 TO 2	2 TO 4	4 TO 6	6 TO 12.4	12 TO 18	
1-1836-524-WH 24	S	24.0	0.25	5.4	1.07	1.12	1.18	1.23	1.28	1.30	0.33	0.44	0.68	0.86	1.32	1.69	61.0
1-1836-524-WH 30	S	30.0	0.30	5.8	1.07	1.12	1.18	1.23	1.28	1.30	0.39	0.53	0.83	1.04	1.60	2.05	76.2
1-1836-524-WH 36	S	36.0	0.36	6.1	1.07	1.12	1.18	1.23	1.28	1.30	0.46	0.62	0.97	1.22	1.89	2.41	91.4
1-1836-524-WH 39	M	39.4	0.39	6.3	1.07	1.12	1.18	1.23	1.28	1.30	0.49	0.68	1.05	1.32	2.05	2.61	100.1
1-1836-524-WH 48	S	48.0	0.48	6.9	1.07	1.12	1.18	1.23	1.28	1.30	0.58	0.81	1.25	1.58	2.45	3.13	121.9
1-1836-524-WH 59	M	59.1	0.59	7.6	1.07	1.12	1.18	1.23	1.28	1.30	0.70	0.99	1.51	1.91	2.97	3.79	150.0
1-1836-524-WH 60	S	60.0	0.60	7.6	1.10	1.15	1.20	1.25	1.30	1.35	0.71	1.00	1.53	1.94	3.01	3.85	152.4
1-1836-524-WH 72	S	72.0	0.72	8.4	1.10	1.15	1.20	1.25	1.30	1.35	0.84	1.19	1.81	2.30	3.58	4.57	182.9
1-1836-524-WH 79	M	78.8	0.79	8.8	1.10	1.15	1.20	1.25	1.30	1.35	0.91	1.30	1.97	2.50	3.90	4.98	200.2
1-1836-524-WH 84	S	84.0	0.84	9.1	1.10	1.15	1.20	1.25	1.30	1.35	0.97	1.38	2.10	2.66	4.14	5.29	213.4
1-1836-524-WH 96	S	96.0	0.96	9.9	1.10	1.15	1.20	1.25	1.30	1.35	1.10	1.57	2.38	3.02	4.71	6.01	243.8
2-1836-524-WH 10		120.0	1.20	11.4	1.12	1.18	1.23	1.28	1.35	1.38	1.36	1.95	2.94	3.74	5.84	7.45	304.8
2-1836-524-WH 12		144.0	1.44	12.9	1.12	1.18	1.23	1.28	1.35	1.38	1.61	2.33	3.51	4.45	6.97	8.89	365.8
2-1836-524-WH 15	D	180.0	1.80	15.2	1.12	1.18	1.23	1.28	1.35	1.38	2.00	2.90	4.36	5.53	8.66	11.05	457.2
2-1836-524-WH 20	D	240.0	2.40	18.9	1.12	1.18	1.23	1.28	1.35	1.38	2.64	3.84	5.77	7.33	11.49	14.65	609.6
2-1836-524-WH 25	D	300.0	3.00	22.7	1.12	1.18	1.23	1.28	1.35	1.38	3.29	4.79	7.18	9.13	14.31	18.25	762.0
2-1836-524-WH 30	D	360.0	3.60	26.4	1.12	1.18	1.23	1.28	1.35	1.38	3.93	5.73	8.59	10.93	17.13	21.85	914.4
1 = INCHES	S	= STANDARD ITEM															
2 = FEET	M	= METRIC EQUIVALENT LENGTH															
MAXIMUM SPECIFICATIONS ARE PRODUCT MAXIMUM INCLUDING MEASURING SYSTEM UNCERTAINTY.																	

NOTE: PRODUCT SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.
 PRODUCT SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CONSULT FACTORY FOR PRODUCT CHARACTERISTICS AT OTHER CONDITIONS.
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Test Cables



ELECTRICAL SPECIFICATIONS						
IMPEDANCE, NOMINAL:	50 OHMS					
CAPACITANCE NOMINAL:	28.8 pF/FOOT					
VELOCITY OF PROPAGATION, NOMINAL:	70.5 %					
RELATIVE SHIELDING:	-100.0 dB MIN.					
INSULATION RESISTANCE:	1000 MEGOHMS MIN.					
DIELECTRIC WITHSTANDING VOLTAGE:	1500 VRMS MIN.					
ELECTRICAL DELAY, NOMINAL:	1.44 ns/FOOT					
ELECTRICAL DELAY, NOMINAL:	120 ps/INCH					
PULSE RF POWER:	1250 WATTS MAX. (INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)					
F (IN GHz) ----->	1	2	4	6	12.4	18
MAX. CW WATTS ----->	50	33	22	17.3	11.4	8.5
PHASE STABILITY DEG.	0.3	0.6	1.2	1.8	3.6	5.4
LOSS STABILITY dB----->	0.01	0.01	0.01	0.015	0.031	0.045
CABLE FORMED AND STRAIGHTENED 90 DEGREES ON A 4" RADIUS						

MATERIALS AND FINISHES		
DESCRIPTION	MATERIAL	FINISH OR COLOR
CABLE:	7-1112-524-11	SEE DATA SHEET
CABLE JACKET:	POLYURETHANE	BLACK
MARKER:	MIL-I-23053	WHITE/BLACK MARKING
BOOTS:	MIL-I-23053	BLACK
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
CONTACTS:	ASTM B196 BeCu	MIL-G-45204 GOLD PLATED
INSULATORS:	ASTM D1457 PTFE	NONE
SMA BODY:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
SMA NUT:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
SMA GASKET:	ZZ-R-765 SILICON RUBBER	RED
SOLVENTS:	NO OZONE DEPLETING MATERIALS ARE USED	

MECHANICAL SPECIFICATIONS:	
CABLE MAX. DIAMETER:	0.222 INCHES
MINIMUM BEND RADIUS:	4.00 INCHES
CONNECTOR RETENTION:	100 POUNDS MIN.
TEMPERATURE RANGE:	-55 to +85 DEGREES C
MATING TORQUE:	7-10 INCH POUNDS
SMA CONNECTOR INTERFACES:	MIL-STD-348

PART NUMBER		LENGTH INCHES	+ - LENGTH	WEIGHT OUNCES	MAXIMUM VSWR :1 AT FREQUENCY (IN GHz.)						MAXIMUM INSERTION LOSS IN dB AT FREQ. (IN GHz.)						LENGTH CM
					UP TO 1	1 TO 2	2 TO 4	4 TO 6	6 TO 12.4	12 TO 18	UP TO 1	1 TO 2	2 TO 4	4 TO 6	6 TO 12.4	12 TO 18	
1-3636-524-WH12	S	12.0	0.25	4.6	1.07	1.12	1.18	1.23	1.28	1.30	0.19	0.23	0.38	0.47	0.72	0.93	30.5
1-3636-524-WH18	S	18.0	0.25	5.0	1.07	1.12	1.18	1.23	1.28	1.30	0.25	0.33	0.52	0.65	1.00	1.29	45.7
1-3636-524-WH24	S	24.0	0.25	5.4	1.07	1.12	1.18	1.23	1.28	1.30	0.32	0.42	0.66	0.83	1.29	1.65	61.0
1-3636-524-WH30	S	30.0	0.25	5.8	1.07	1.12	1.18	1.23	1.28	1.30	0.38	0.52	0.81	1.01	1.57	2.01	76.2
1-3636-524-WH36	S	36.0	0.36	6.1	1.07	1.12	1.18	1.23	1.28	1.30	0.45	0.61	0.95	1.19	1.85	2.37	91.4
1-3636-524-WH39	M	39.4	0.39	6.3	1.07	1.12	1.18	1.23	1.28	1.30	0.48	0.66	1.03	1.29	2.01	2.57	100.0
1-3636-524-WH42	S	42.0	0.42	6.5	1.10	1.15	1.20	1.25	1.30	1.35	0.51	0.70	1.09	1.37	2.13	2.73	106.7
1-3636-524-WH48	S	48.0	0.48	6.9	1.10	1.15	1.20	1.25	1.30	1.35	0.57	0.80	1.23	1.55	2.41	3.09	121.9
1-3636-524-WH54	S	54.0	0.54	7.3	1.10	1.15	1.20	1.25	1.30	1.35	0.64	0.89	1.37	1.73	2.70	3.45	137.2
1-3636-524-WH59	M	59.0	0.59	7.6	1.10	1.15	1.20	1.25	1.30	1.35	0.69	0.97	1.49	1.88	2.93	3.75	150.0
1-3636-524-WH72	S	72.0	0.72	8.4	1.10	1.15	1.20	1.25	1.30	1.35	0.83	1.18	1.79	2.27	3.54	4.53	182.9
1-3636-524-WH84		84.0	0.84	9.1	1.10	1.15	1.20	1.25	1.30	1.35	0.96	1.37	2.08	2.63	4.11	5.25	213.4
1-3636-524-WH96		96.0	0.96	9.9	1.10	1.15	1.20	1.25	1.30	1.35	1.09	1.56	2.36	2.99	4.67	5.97	243.8
2-3636-524-WH10		120.0	1.20	11.4	1.12	1.18	1.23	1.28	1.35	1.38	1.35	1.93	2.92	3.71	5.80	7.41	304.8
2-3636-524-WH15		180.0	1.80	15.2	1.12	1.18	1.23	1.28	1.35	1.38	1.99	2.88	4.34	5.51	8.63	11.01	457.2
2-3636-524-WH20		240.0	2.40	18.9	1.12	1.18	1.23	1.28	1.35	1.38	2.63	3.83	5.75	7.31	11.45	14.61	609.6
2-3636-524-WH25		300.0	3.00	22.7	1.12	1.18	1.23	1.28	1.35	1.38	3.28	4.77	7.16	9.11	14.27	18.21	762.0
1= INCHES	S	= STANDARD ITEM															
2 = FEET	M	= METRIC EQUIVALENT LENGTH															

NOTE: PRODUCT SPECIFICATIONS ARE VERIFIED AT 73 DEG. F. SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.
 PRODUCT SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CONSULT FACTORY FOR PRODUCT CHARACTERISTICS AT OTHER CONDITIONS.

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THE ARMORED WORKHORSE® SERIES

18 and 26.5 GHz Cable Assemblies



DESCRIPTION

The Armored **WORKHORSE®** is the result of Tensolite's years of assembly experience coupled with the demand for lower cost products. This assembly uses time proven "504" cable, our most rugged stainless steel connectors and a **new, extremely durable** yet cost effective attachment method. The Armored **WORKHORSE®** features a stainless steel, crush-proof jacket that protects the cable from the everyday wear and tear associated with a lab environment. Especially effective on larger cable assemblies, the Armored **WORKHORSE™** will withstand the test of time.

APPLICATIONS

The Armored **WORKHORSE®** is specifically designed for temperature testing, very high volume production lines and strenuous flexing/mating situations that would quickly destroy typical connectors and attachment methods.

- -55° C to +105° C temperature testing
- Very high volume production testing
- Strenuous flexing/mating situations
- Replaces expensive lab test cables

*Repair or replacement if connector attachment fails within 4 months of shipment.
Excludes cable or connector interface damage from misuse or abuse,*

FEATURES

- **New, extremely durable** and long lasting connector attachment method
- "Armored" for even greater protection
- Excellent high frequency response
- Phase stable with flexure
- **Dramatically** cuts the cost of production test cables
- Standard lengths in stock

Tensolite RF/Microwave Interconnects 1-800-362-FLEX

A CARLISLE Company

Website: www.tensolite.com

**FOR ADDITIONAL CATALOGS
CALL "THE CATALOG REQUEST LINE"
1-800-362-3539**

**CALL 1-800-362-FLEX
FOR ADDITIONAL INFORMATION**

**CHECK OUT TENSOLITE'S WEB SITE:
www.tensolite.com**

EMAIL US AT rfmicrowave@tensolite.com

FAX: 360-759-4016

WORKHORSE® 40 ARMORED CABLE



The Tensolite “Workhorse 40” Armored Cable Assembly is designed to perform in high volume, strenuous test environments. Its rugged design provides protection from wear and tear reducing the need for costly replacement test cables.

Tensolite’s years of assembly experience combined with a demand for lower cost production solutions resulted in the development of the “Workhorse 40”.

The “Workhorse 40” utilizes a new Tensolite 40 GHz cable encased in a stainless steel, crush resistant armor. This new cable provides low loss and low VSWR, while maintaining phase stability.

Tensolite designed “SMK”(2.92) tough stainless steel connectors combined with the Tensolite 40 GHz cable deliver more tests with maximum accuracy and repeatability.

The “Workhorse 40” Armored assembly will stand the test of time!



Typical VSWR 1.35:1 @ 40 GHz
Typical Loss 2dB per foot, Assembly
Temperature Rating -50°C to +105°C

Intended Applications:

High Volume Test Lab
Vector Network Analyzer
Calibration
Antenna Range
Custom Applications

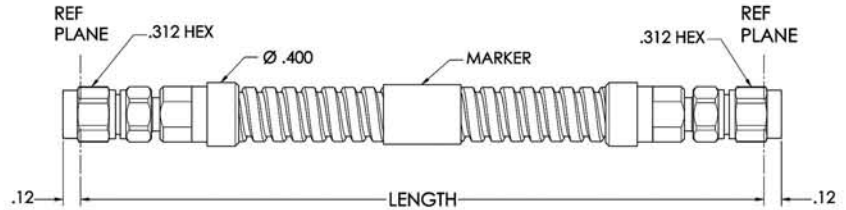
WORKHORSE® 40 ARMORED CABLE

Technical Data Sheet

2.92MM males on 40GHz Workhorse® Cable

ELECTRICAL SPECIFICATIONS	
IMPEDANCE, NOMINAL:	50 OHMS
CAPACITANCE NOMINAL:	28.0 pf/FOOT
VELOCITY OF PROPAGATION, NOMINAL:	70.5 %
RELATIVE SHIELDING:	-100.0 dB MIN.
INSULATION RESISTANCE:	1000 MEGOHMS MIN.
DIELECTRIC WITHSTANDING VOLTAGE:	1069 VRMS MAX.
ELECTRICAL DELAY, NOMINAL:	1.44 ns/FOOT
ELECTRICAL DELAY, NOMINAL:	120 ps/INCH
F (IN GHz) ----->	2 6 12 18 26 40
MAX. CW WATTS ----->	54 30 20 16 12 9

MECHANICAL SPECIFICATIONS:	
CABLE MAX. DIAMETER:	0.350 INCHES
MINIMUM BEND RADIUS:	2.10 INCHES
CONNECTOR RETENTION:	60 POUNDS MIN.
TEMPERATURE RANGE:	-55 to +105 DEGREES C
MATING TORQUE:	7-10 INCH POUNDS
CONNECTOR INTERFACE:	IEEE-STD-287



MATERIALS AND FINISHES		
DESCRIPTION	MATERIAL	FINISH OR COLOR
ARMOR:	STAINLESS STEEL STRIP	NONE
CONTACTS:	ASTM-B196, BeCu C173	ASTM B-488, GOLD PLATED
BEAD:	NORYL	NONE
BODY CABLE ENTRY:	ASTM-A-582, 303 STAINLESS STEEL	ASTM A-967, PASSIVATED
BODY:	ASTM-A-582, 303 STAINLESS STEEL	ASTM A-967, PASSIVATED
NUT:	ASTM-A-582, 303 STAINLESS STEEL	ASTM A-967, PASSIVATED
RETAINING RING:	ASTM-B196, BeCu C173	NONE
AVAILABLE GASKET:	ZZ-R-765, SILICON RUBBER	RED
SOLVENTS:	NO OZONE DEPLETING MATERIALS ARE USED	

PART NUMBER	LENGTH INCHES	+ - LENGTH	WEIGHT OUNCES	MAXIMUM VSWR :1 AT FREQUENCY (IN GHz.)							MAXIMUM INSERTION LOSS IN dB AT FREQ. (IN GHz.)						LENGTH CM
				UP TO 2	2 TO 6	6 TO 12	12 TO 18	18 TO 26	26 TO 40	UP TO 2	2 TO 6	6 TO 12	12 TO 18	18 TO 26	26 TO 40		
WHA40-K6K6-0 24	S 24.0	0.25	4.5	1.08	1.12	1.20	1.25	1.32	1.35	0.75	1.35	2.01	2.57	3.22	4.39	61.0	
WHA40-K6K6-0 30	30.0	0.30	4.6	1.08	1.12	1.20	1.25	1.32	1.35	0.91	1.65	2.45	3.14	3.94	5.33	76.2	
WHA40-K6K6-0 36	S 36.0	0.36	4.8	1.08	1.12	1.20	1.25	1.32	1.35	1.07	1.95	2.90	3.71	4.65	6.28	91.4	
WHA40-K6K6-0 42	42.0	0.42	4.9	1.08	1.12	1.20	1.25	1.32	1.35	1.23	2.25	3.35	4.28	5.37	7.22	106.7	
WHA40-K6K6-0 48	S 48.0	0.48	5.1	1.08	1.12	1.20	1.25	1.32	1.35	1.39	2.55	3.79	4.85	6.08	8.16	121.9	
WHA40-K6K6-0 54	54.0	0.54	5.2	1.12	1.15	1.23	1.28	1.33	1.38	1.56	2.84	4.24	5.42	6.80	9.11	137.2	
WHA40-K6K6-0 60	60.0	0.60	5.4	1.12	1.15	1.23	1.28	1.33	1.38	1.72	3.14	4.69	5.99	7.52	10.05	152.4	
WHA40-K6K6-0 66	66.0	0.66	5.5	1.12	1.15	1.23	1.28	1.33	1.38	1.88	3.44	5.13	6.56	8.23	10.99	167.6	
WHA40-K6K6-0 72	72.0	0.72	5.7	1.12	1.15	1.23	1.28	1.33	1.38	2.04	3.74	5.58	7.13	8.95	11.94	182.9	
WHA40-K6K6-0 78	78.0	0.78	5.9	1.12	1.15	1.23	1.28	1.33	1.38	2.20	4.04	6.03	7.70	9.67	12.88	198.1	
WHA40-K6K6-0 84	84.0	0.84	6.0	1.12	1.15	1.23	1.28	1.33	1.38	2.36	4.33	6.47	8.27	10.38	13.82	213.4	
WHA40-K6K6-0 90	90.0	0.90	6.2	1.12	1.15	1.23	1.28	1.33	1.38	2.53	4.63	6.92	8.84	11.10	14.77	228.6	
WHA40-K6K6-0 96	96.0	0.96	6.3	1.12	1.15	1.23	1.28	1.33	1.38	2.69	4.93	7.36	9.41	11.81	15.71	243.8	
WHA40-K6K6-1 20	120.0	1.20	6.9	1.13	1.18	1.25	1.31	1.36	1.41	3.33	6.12	9.15	11.69	14.68	19.48	304.8	

S = STANDARD ITEM

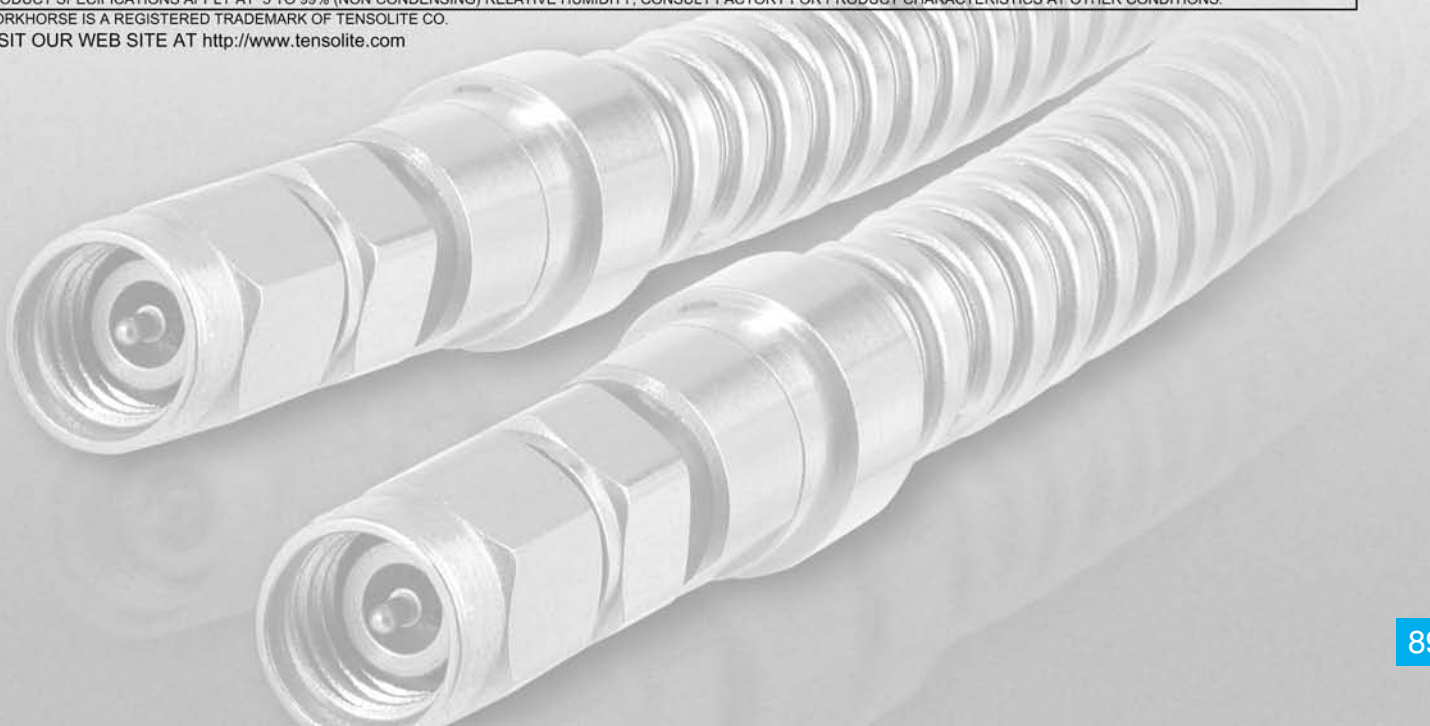
MAXIMUM SPECIFICATIONS ARE PRODUCT MAXIMUM INCLUDING MEASURING SYSTEM UNCERTAINTY.

NOTE: PRODUCT SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.

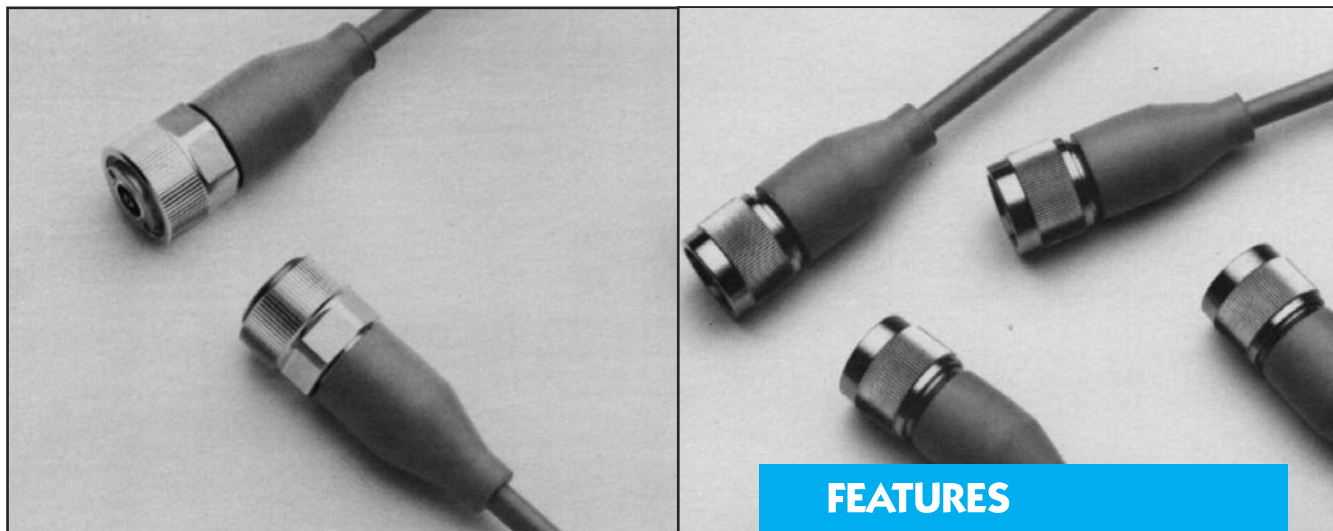
PRODUCT SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CONSULT FACTORY FOR PRODUCT CHARACTERISTICS AT OTHER CONDITIONS.

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TS1818 SERIES TS7878 SERIES TEST EQUIPMENT REPLACEMENT CABLES



FEATURES

DESCRIPTION

The TS series of flexible cable assemblies is equivalent to the cables that Tensolite supplies to the test and measurement industry.

They offer the same reliable construction and repeatable performance as the original test cables. The TS series is built and tested under rigid quality controlled conditions to meet testing standards.

Cables may be purchased in sets or individually. Phase matching is maintained because all cables are matched to a laboratory standard in accordance with the OEM specification.

- DC to 6.0 GHz
6 to 18.0 GHz
- OEM design equivalent
- Phase matched to a laboratory standard
- Available as sets or individually
- 24-hour delivery
- May be used with other manufacturers test equipment

Tensolite RF/Microwave Interconnects 1-800-362-FLEX

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TENSOLITE CABLE ASSEMBLY TECHNICAL DATA

ELECTRICAL SPECIFICATIONS

IMPEDANCE, NOMINAL:	50	OHMS
CAPACITANCE NOMINAL:	29.4	pf/FOOT
VELOCITY OF PROPAGATION, NOMINAL:	70.7	%
RELATIVE SHIELDING PARALLEL TO CHING 24 IN:	-100.0	dB MIN.
INSULATION RESISTANCE:	1000	MEG OHMS MIN.
DIELECTRIC WITHSTANDING VOLTAGE:	1000	VRMS MIN.
ELECTRICAL DELAY, NOMINAL:	1.44	ns /FOOT
ELECTRICAL DELAY, NOMINAL:	120	ps /INCH
PULSE RF POWER:	1250	WATTS MAX.

(INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)

F (IN GHz) →	1	2	4	6	12	18
MAX. CW WATTS →	50	35	22	17	6	4
PHASE STABILITY DEG.	0.3	0.6	1.2	1.8	3.6	5.4
LOSS STABILITY dB →	0.01	0.01	0.01	0.015	0.03	0.05

CABLES ARE MANUFACTURED AS MATCHED SETS OR MATCHED TO LABORATORY STANDARDS.
 CABLES MAINTAIN NETWORK ANALYZER COMPATIBLE CHARACTERISTICS DURING PRODUCT LIFE
 WHEN FORMED UP TO 180 DEGREES AT A 4 INCH (2.5 INCH FOR TS1818-07) OR GREATER RADIUS.

MECHANICAL SPECIFICATIONS:

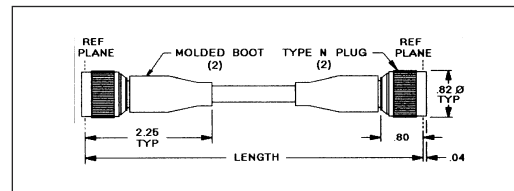
CABLE MAX. DIAMETER:	0.220	INCHES
MIN. ONE TIME BEND RADIUS:	1.50	INCHES
FLEXED BEND RADIUS:	4.00	INCHES
CONNECTOR RETENTION:	100	POUNDS MIN.
TEMPERATURE RANGE:	-13 TO +33	DEGREES C
MATING TORQUE:	7-10	INCH POUNDS
CONNECTOR INTERFACES:	MIL-STD-348(N) IEEE 287 (7MM)	

MATERIALS AND FINISHES

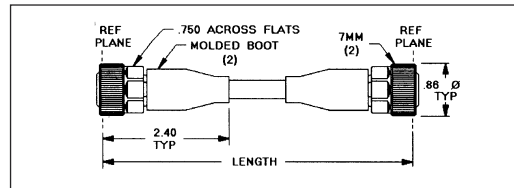
DESCRIPTION	MATERIAL	FINISH OR COLOR
CABLE JACKET:	PVC	GRAY
MARKING:	-	BLACK
BOOTS:	RUBBER COMPOUND	GRAY
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
CONTACTS:	ASTM B196 BeCu	MIL-G-45204 GOLD PLATED
INSULATORS:	ASTM D1457 PTFE	NONE
7MM INSULATORS:	PTFE COMPOSITE	NONE
7MM CONNECTOR BODY:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
7MM CONNECTOR BODY:	ASTM B196 BeCu	MIL-G-45204 GOLD PLATED
7MM TS:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
AVAILABLE GAS:	ZZ-R-765 SILICON RUBBER	RED

THIS TYPE N CONNECTOR DOES NOT HAVE A WEATHER SEALING GAS. EXTENSION CABLES AVAILABLE.
 ORDER GAS, EXTENSION CABLE, PART NUMBER 5-1368-100-17.
 SOLVENTS: NO OZONE DEPLETING MATERIALS USED

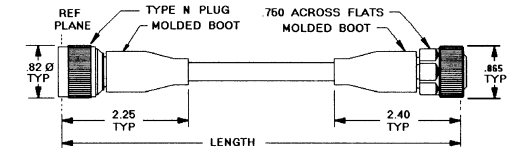
TS SERIES CABLE ASSEMBLIES



TS1818 CONFIGURATION



TS7878 CONFIGURATION



TS1878 CONFIGURATION

OTHER AVAILABLE CONFIGURATIONS:				
CONN. 1	CONN. 2	LENGTH	PART NUMBER	PRODUCT SPECIFICATIONS
N MALE	7MM	24	TS1878-24	SEE TS1818-24 ABOVE
N MALE	7MM	34	TS1878-34	SEE TS1818-34 ABOVE
7MM	7MM	34	TS7878-34	SEE TS1818-34 ABOVE

PART NUMBER	CONN	LENGTH INCHES	LENGTH	MAX. WEIGHT OUNCES	MAXIMUM VSWR :1 AT FREQUENCY (IN GHz.)								MAXIMUM INSERTION LOSS IN dB AT FREQ. (IN GHz.)								LENGTH CM
					1 TO 1	1 TO 2	2 TO 3	3 TO 6	6 TO 12 REF.	12 TO 18 REF.	1 TO 1	1 TO 2	2 TO 3	3 TO 6	6 TO 12 REF.	12 TO 18 REF.					
TS1818-07	N	7.5	0.38	4.3	1.07	1.10	1.13	1.18	1.25	-	0.16	0.21	0.27	0.38	0.55	-	19.1				
TS1818-07S	N	4-7.5 INCH CABLES			-	-	-	-	-	-	-	-	-	-	-	-	-				
TS1818-24	N	24.0	1.20	5.3	1.07	1.10	1.13	1.18	1.25	-	0.32	0.46	0.58	0.85	1.28	-	61.0				
TSA1818-34	N	24	1.20	5.3	1.06	1.06	1.06	-	-	-	0.32	0.46	0.58	0.85	1.28	-	61.0				
TS1818-34	N	34.0	1.70	5.8	1.07	1.10	1.13	1.18	1.25	-	0.43	0.61	0.77	1.13	1.71	-	86.4				
TS1818-STR	SET 3-24 AND 1-34 INCH CABLES			-	-	-	-	-	-	-	-	-	-	-	-	-	-				
TS7878-24	7MM	24.0	1.20	5.3	1.07	1.10	1.12	1.16	1.22	1.30	0.32	0.46	0.58	0.85	1.28	1.66	61.0				
TS7878-ST5	7MM	2-24 INCH CABLES			-	-	-	-	-	-	-	-	-	-	-	-	-				

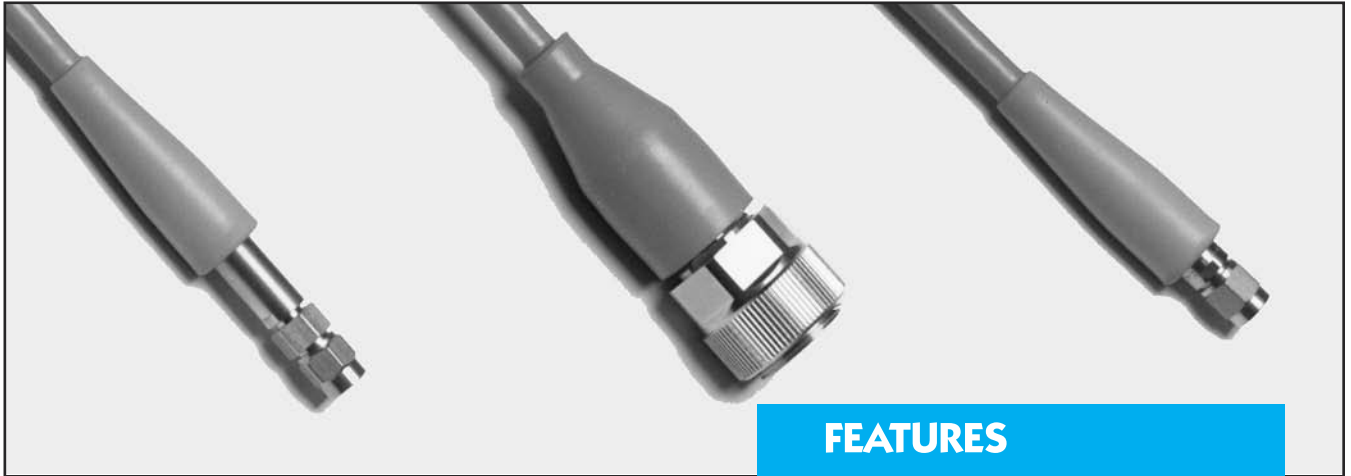
MAXIMUM SPECIFICATIONS ARE PRODUCT MAXIMUM INCLUDING MEASUREMENT UNCERTAINTY.
 SPECIFICATIONS FROM 6 TO 18 GHz ARE NOT VERIFIED AND ARE FOR REFERENCE ONLY.

CONN	LENGTH	ORDER TENSOLITE PART NUMBER
N	24,34	TS1818-STR (SET OF 3-24, 1-34)
7MM	24	TS7878-ST5 (SET OF 2-7MM)
7MM	24	TS7878-24
N	34	TS1818-34
N	24	TS1818-24
N	8	TS1818-07
N	7.5	TS1818-07S (SET OF 4-7.5)
N	24	TSA1818-24V

TS1818-STR IS A SET OF 3-24 INCH AND 1-34 INCH TYPE N CABLES USED TO INTERCONNECT TRANSMISSION REFLECTION TEST SETS AND POWER SPLITTERS
 TS7878-ST5 IS A SET OF 2 MATCHED 24 INCH 7MM CABLES USED AS TEST PORT EXTENSION CABLES ON TRANSMISSION REFLECTION AND S PARAMETER TEST SETS.
 TSA1818-24V IS A LOW VSWR (<30 dB return loss) 24 INCH TYPE N CABLE
 PRODUCT SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CONSTANT FACTOR, FOR PRODUCT CHARACTERISTICS AT OTHER CONDITIONS.
 PRODUCT INFORMATION AVAILABLE ON OUR WEB PAGE @ <http://www.tensolite.com>

Test Cables

SMA “KU” & “K”, TYPE N “KU” & 3.5MM “K” SERIES CABLE ASSEMBLIES



DESCRIPTION

Tensolite’s “KU” and “K” series cable assemblies are designed for ruggedness and long life. Constructed using our “504” high performance cable, with an abrasion resistant outer jacket and boots and Tensolite’s own captive contact and high frequency connectors, these assemblies exhibit superior electrical characteristics DC to 18.0 or DC to 26.5 GHz. Our proven TRI-SYSTEM method of connector attachment ensures reliable operation time after time.

APPLICATIONS

The “KU” and “K” series enhance system value when shipped with your test equipment. They also make excellent replacement test port extension cables for the laboratory. Use these cables where superior electrical performance and/or appearance are a concern.

- OEM test equipment
- Aftermarket test port extension cables
- EMI/RFI sensitive testing

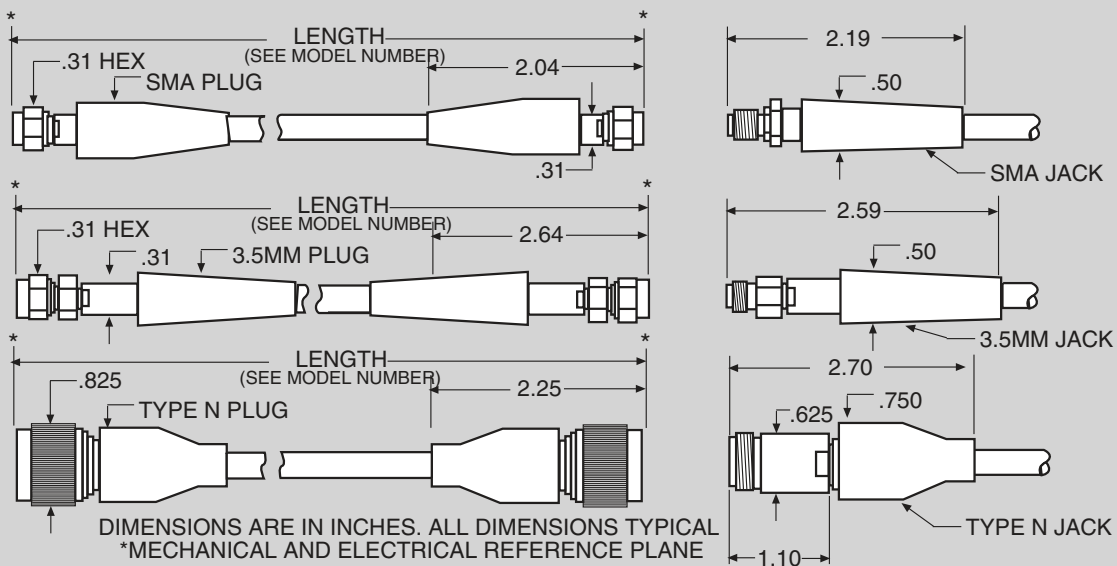
FEATURES

- DC to 18.0 GHz and DC to 26.5 GHz operation
- Triple shielded, high performance flexible cable
- High frequency, captive contact connectors
- Rugged TRI-SYSTEM method of connector attachment
- Superior electrical characteristics
- Durable, abrasion resistant, aesthetic outer jacket and strain relief boots

Tensolite RF/Microwave Interconnects 1-800-362-FLEX

A CARLISLE Company

Website: www.tensolite.com



MECHANICAL SPECIFICATIONS:

Connectors:

- Finish: Passivated stainless steel.
- Contacts: Gold plated beryllium copper.
- Dielectric: SMA & Type N: PTFE.
3.5MM: Air
- See our 26.5 GHz “Hybrid” SMA and 18.0 GHz Type N product feature bulletins for more detailed information.

Cable:

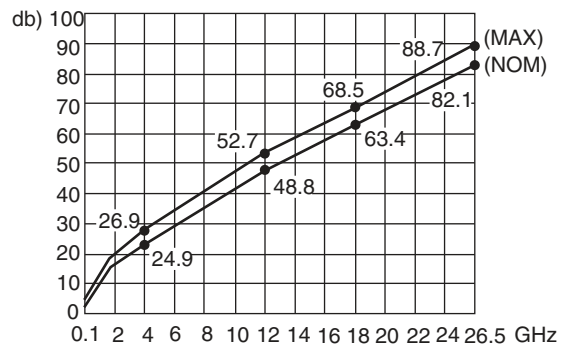
- Center conductor: .037 silver plated copper clad steel.
- Dielectric: .117 extruded PTFE
- Outer conductor: Silver plated copper strip braid, foil interlayer, and silver plated copper wire braid.
- Outer jacket: .250 abrasion resistance sleeve over .195 FEP.
- Minimum bend radius: 1.0” one time.
4.0” constant flexing.
- See our 504 high performance cable feature bulletin for more detailed information.

Attachment Method:

- **TRI-SYSTEM:** Solder, clamp, epoxy potting.
Strain relief boot cover.
- Connector retention: 90 lbs. minimum.

ELECTRICAL SPECIFICATIONS:

Cable **ONLY**, insertion loss (per 100 ft).



Cable **ASSEMBLY** specifications (≤ 12 ft. long):

- VSWR (max):
SMA's: 1.30:1 1.35:1
Type N's: 1.30:1 N/A
3.5MM's: N/A 1.35:1

- Phase stability while moving and/or at rest (ten, 180° bends to a 4.0” radius):

Typical	Maximum
$\pm 0.5^\circ$ @ 2.0 GHz	$\pm 1.0^\circ$ @ 2.0 GHz
$\pm 2.0^\circ$ @ 10.0 GHz	$\pm 3.0^\circ$ @ 10.0 GHz
$\pm 3.0^\circ$ @ 18.0 GHz	$\pm 5.0^\circ$ @ 18.0 GHz
$\pm 5.0^\circ$ @ 26.5 GHz	$\pm 7.0^\circ$ @ 26.5 GHz

- Relative shielding: < -100 db.
- Velocity of propagation: 70.7%.
- Power handling: 110 watts (sea level).
- Delay: 1.44 ns/ft.
- Impedance: 50 ohms nominal.
- Operating temperature range: -13°C to +33°C.

How to order: Selected lengths and connector configurations in stock. Other lengths may be specified:

XX XXXX - XXX
Length in whole inches.

(SMA & Type N) “KU” = 18.0 GHz.	1818 = Type N plugs.	1820 = plug/jack.
(SMA & 3.5MM) “K” = 26.5 GHz.	3636 = SMA plugs.	3638 = plug/jack.
	7272 = 3.5MM plugs.	7274 = plug/jack.

TENSOLITE CABLE ASSEMBLY TECHNICAL DATA

KU CABLE ASSEMBLIES WITH HYBRID SMA MALE CONNECTORS

ELECTRICAL SPECIFICATIONS

IMPEDANCE, NOMINAL:	50	OHMS
CAPACITANCE NOMINAL:	29.4	pf/FOOT
VELOCITY OF PROPAGATION, NOMINAL:	70.7	%
RELATIVE SHIELDING:	-100.0	dB MIN.
INSULATION RESISTANCE:	1000	MEGOHMS MIN.
DIELECTRIC WITHSTANDING VOLTAGE:	1000	VRMS MIN.
ELECTRICAL DELAY, NOMINAL:	1.44	ns /FOOT
ELECTRICAL DELAY, NOMINAL:	120	ps /INCH
PULSE RF POWER:	1250	WATTS

(INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)

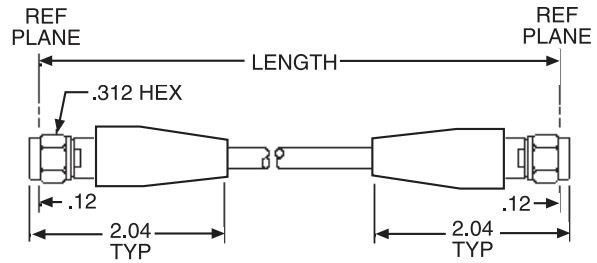
F (IN GHz) →	1	2	4	12	18
MAX. CW WATTS →	50	40	20	15	10
PHASE STABILITY DEG.	0.3	0.6	1.2	3.6	5.4
LOSS STABILITY dB →	0.01	0.01	0.01	0.03	0.05

VSWR STABILITY → LESS THAN 0.02 THROUGH 18 GHz.

CABLE FORMED AND STRAIGHTENED 90 DEGREES ON A 4" RADIUS

MECHANICAL SPECIFICATIONS:

CABLE MAX. DIAMETER:	0.200	INCHES
MIN. ONE TIME BEND RADIUS:	1.00	INCHES
PREFERRED BEND RADIUS:	4.00	INCHES
CONNECTOR RETENTION:	100	POUNDS MIN.
TEMPERATURE RANGE:	-13 / +33	DEGREES C
MATING TORQUE:	7-10	INCH POUNDS
CONNECTOR INTERFACE:	TENSOLITE HYBRID SMA	MIL-STD-348



MATERIALS AND FINISHES

DESCRIPTION	MATERIAL	FINISH OR COLOR
CABLE JACKET:	LP-389 FEP	BROWN TINT
CABLE SLEEVE:	POLYVINYLCHLORIDE	GREEN
BOOTS:	RUBBER COMPOUND	GREEN
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
CONTACTS:	ASTM B196 BeCu	MIL-G-45204 GOLD PLATED
INSULATORS:	ASTM D1457 PTFE	NONE
CONNECTOR BODIES:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
CONNECTOR NUTS:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
GASKET:	ZZ-R-765 SILICON RUBBER	RED
CABLE IDENTIFICATION LABEL MARKER:	POLYVINYLCHLORIDE	YELLOW
SOLVENTS:	NO OZONE DEPLETING MATERIALS ARE USED	

PART NUMBER	LENGTH INCHES	MAX. WEIGHT OUNCES	MAXIMUM VSWR:1 AT FREQUENCY (IN GHz.)						MAXIMUM INSERTION LOSS IN dB AT FREQ. (IN GHz.)						LENGTH CM
			1 TO 2	2 TO 4	4 TO 6	6 TO 12	12 TO 18	1 TO 2	2 TO 4	4 TO 6	6 TO 12	12 TO 18			
KU-3636-006	6.0	0.25	3.3	1.10	1.15	1.20	1.25	1.30	0.21	0.28	0.35	0.50	0.63	15.2	
KU-3636-012	12.0	0.25	3.7	1.10	1.15	1.20	1.25	1.30	0.30	0.42	0.52	0.76	0.98	30.5	
KU-3636-018	18.0	0.25	4.0	1.10	1.15	1.20	1.25	1.30	0.39	0.55	0.70	1.02	1.32	45.7	
KU-3636-024	24.0	0.25	4.4	1.10	1.15	1.20	1.25	1.30	0.48	0.69	0.87	1.29	1.66	61.0	
KU-3636-030	30.0	0.25	4.7	1.10	1.15	1.20	1.25	1.30	0.57	0.82	1.04	1.55	2.00	76.2	
KU-3636-036	36.0	0.36	5.0	1.10	1.15	1.20	1.25	1.30	0.66	0.96	1.21	1.81	2.35	91.4	
KU-3636-039	39.4	0.39	5.2	1.10	1.15	1.20	1.25	1.30	0.71	1.03	1.30	1.96	2.54	100.0	
KU-3636-040	40.0	0.40	5.3	1.10	1.15	1.20	1.25	1.30	0.72	1.04	1.32	1.99	2.57	101.5	
KU-3636-042	42.0	0.42	5.4	1.10	1.15	1.20	1.25	1.30	0.75	1.09	1.38	2.08	2.69	106.7	
KU-3636-048	48.0	0.48	5.7	1.10	1.15	1.20	1.25	1.30	0.84	1.22	1.55	2.34	3.03	121.9	
KU-3636-054	54.0	0.54	6.1	1.10	1.15	1.20	1.25	1.30	0.93	1.36	1.72	2.60	3.37	137.2	
KU-3636-060	60.0	0.60	6.4	1.10	1.15	1.20	1.25	1.30	1.02	1.49	1.89	2.86	3.71	152.4	
KU-3636-072	72.0	0.72	7.1	1.10	1.15	1.20	1.25	1.30	1.20	1.76	2.23	3.39	4.40	182.9	
KU-3636-084	84.0	0.84	7.8	1.10	1.15	1.20	1.25	1.30	1.38	2.03	2.58	3.92	5.08	213.4	
KU-3636-096	96.0	0.96	8.5	1.10	1.15	1.20	1.25	1.30	1.56	2.30	2.92	4.44	5.77	243.8	
KU-3636-108	108.0	1.08	9.2	1.10	1.15	1.20	1.25	1.30	1.74	2.57	3.26	4.97	6.45	274.3	
KU-3636-120	120.0	1.20	9.9	1.10	1.15	1.20	1.25	1.30	1.92	2.83	3.60	5.50	7.14	304.8	
KU-3636-144	144.0	1.44	11.2	1.15	1.20	1.25	1.30	1.35	2.28	3.37	4.29	6.55	8.51	365.8	
KU-3636-168	168.0	1.68	12.6	1.15	1.20	1.25	1.30	1.35	2.64	3.91	4.97	7.60	9.87	426.7	
KU-3636-180	180.4	1.80	13.3	1.15	1.20	1.25	1.30	1.35	2.82	4.18	5.32	8.14	10.58	458.1	

MAXIMUM SPECIFICATIONS ARE PRODUCED AT MAXIMUM INCLUDING MEASURING SYSTEM UNCERTAINTY.

NOTE: PRODUCED SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.

PRODUCED SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CONSTANT FACTOR FOR PRODUCED CHARACTERISTICS AT OTHER CONDITIONS

VISIT OUR WEB SITE AT <http://www.tensolite.com>

TENSOLITE CABLE ASSEMBLY TECHNICAL DATA

ELECTRICAL SPECIFICATIONS

IMPEDANCE, NOMINAL:	50	OHMS
CAPACITANCE NOMINAL:	29.4	pf/FOOT
VELOCITY OF PROPAGATION, NOMINAL:	70.7	%
RELATIVE SHIELDING:	-100.0	dB MIN.
INSULATION RESISTANCE:	1000	MEGOHMS MIN.
DIELECTRIC WITHSTANDING VOLTAGE:	1000	VRMS MIN.
ELECTRICAL DELAY, NOMINAL:	1.44	ns /FOOT
ELECTRICAL DELAY, NOMINAL:	120	ps /INCH
PULSE RF POWER:	1250	WATTS

(INTO A 50 OHM STEM, WITH D₀ T_v C_v CLEARANCE LESS THAN CW RATING)

F (IN GHz)→	1	2	4	6	12	18
MAX. CW WATTS →	50	40	20	18	15	10
PHASE STABILITY, DEG.	0.3	0.6	1.2	1.8	3.8	5.4
LOSS STABILITY, dB→	0.01	0.01	0.01	0.02	0.03	0.05

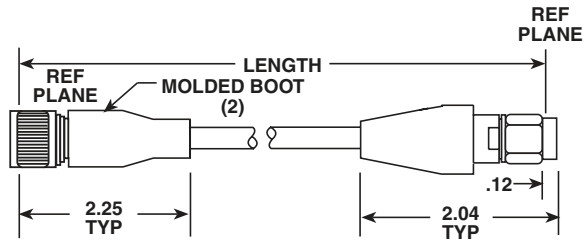
VSWR STABILITY → LESS THAN 0.02 THROUGH 18GHz.

CABLE FORMED AND STRAIGHTENED 90 DEGREES ON A 4" RADIUS

MECHANICAL SPECIFICATIONS:

CABLE MAX. DIAMETER:	0.245	INCHES
MIN. ONE TIME BEND RADIUS:	1.00	INCHES
FLEXED MIN. BEND RADIUS:	4.00	INCHES
CONNECTOR RETENTION:	100	POUNDS MIN.
TEMPERATURE RANGE:	-13 / +33	DEGREES C
SMA MATING TORQUE:	7-10	INCH POUNDS
7 MM MATING TORQUE:	12-15	INCH POUNDS
CONNECTOR INTERFACES:	SMA - TENSOLITE HYBRID SMA	N MIL-STD-348

TYPE N MALE TO HYBRID SMA MALE ON KU CABLE



MATERIALS AND FINISHES

DESCRIPTION	MATERIAL	FINISH OR COLOR
CABLE JACKETS:	POLYVINYLCHLORIDE	BLACK
MARINER:	MIL-I-23053	WHITE
BOOTS:	MIL-I-23053	BLACK
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
CONTACTS:	ASTM B196 BeCu	MIL-G-45204 GOLD PLATED
INSULATORS:	ASTM D1457 PTFE	NONE
CONNECTOR BODIES:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
CONNECTOR NUTS:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
GAS, ET:	ZZ-R-765 SILICON RUBBER	NONE
SOLVENTS:	NO OZONE DEPLETING MATERIALS ARE USED.	

PART NUMBER	LENGTH INCHES	DIA. INCHES	MAX. WEIGHT OUNCES	MAXIMUM VSWR:1 AT FREQ. RANGE (IN GHz.)								MAXIMUM INSERTION LOSS IN dB AT FREQ. (IN GHz.)						LENGTH CM
				0 TO 1	1 TO 2	2 TO 4	4 TO 6	6 TO 12	12 TO 18	0 TO 1	1 TO 2	2 TO 4	4 TO 6	6 TO 12	12 TO 18			
KU-1836-009	9.0	0.25	3.2	1.10	1.15	1.20	1.25	1.30	1.35	0.17	0.24	0.34	0.42	0.62	0.81	22.9		
KU-1836-010	10.0	0.25	3.3	1.10	1.15	1.20	1.25	1.30	1.35	0.18	0.25	0.36	0.45	0.66	0.86	25.4		
KU-1836-011	11.0	0.25	3.3	1.10	1.15	1.20	1.25	1.30	1.35	0.19	0.27	0.39	0.48	0.71	0.92	27.9		
KU-1836-012	12.0	0.25	3.4	1.10	1.15	1.20	1.25	1.30	1.35	0.20	0.28	0.41	0.50	0.75	0.98	30.5		
KU-1836-013	13.0	0.25	3.4	1.10	1.15	1.20	1.25	1.30	1.35	0.21	0.30	0.43	0.53	0.79	1.03	33.0		
KU-1836-014	14.0	0.25	3.5	1.10	1.15	1.20	1.25	1.30	1.35	0.22	0.31	0.45	0.56	0.84	1.09	35.6		
KU-1836-015	15.0	0.25	3.6	1.10	1.15	1.20	1.25	1.30	1.35	0.23	0.33	0.48	0.59	0.88	1.15	38.1		
KU-1836-016	16.0	0.25	3.6	1.10	1.15	1.20	1.25	1.30	1.35	0.24	0.34	0.50	0.62	0.92	1.20	40.6		
KU-1836-017	17.0	0.25	3.7	1.10	1.15	1.20	1.25	1.30	1.35	0.25	0.36	0.52	0.65	0.97	1.26	43.2		
KU-1836-018	18.0	0.18	3.7	1.10	1.15	1.20	1.25	1.30	1.35	0.26	0.37	0.54	0.68	1.01	1.32	45.7		
KU-1836-021	21.0	0.25	3.9	1.10	1.15	1.20	1.25	1.30	1.35	0.29	0.42	0.61	0.76	1.14	1.49	53.3		
KU-1836-024	24.0	0.25	4.1	1.10	1.15	1.20	1.25	1.30	1.35	0.32	0.46	0.68	0.85	1.28	1.66	61.0		
KU-1836-027	27.0	0.25	4.2	1.10	1.15	1.20	1.25	1.30	1.35	0.35	0.51	0.74	0.93	1.41	1.83	68.6		
KU-1836-030	30.0	0.30	4.4	1.10	1.15	1.20	1.25	1.30	1.35	0.39	0.55	0.81	1.02	1.54	2.00	76.2		
KU-1836-033	33.0	0.33	4.6	1.10	1.15	1.20	1.25	1.30	1.35	0.42	0.60	0.88	1.10	1.67	2.17	83.8		
KU-1836-036	36.0	0.36	4.8	1.10	1.15	1.20	1.25	1.30	1.35	0.45	0.64	0.95	1.19	1.80	2.35	91.4		
KU-1836-039	39.0	0.39	4.9	1.10	1.15	1.20	1.25	1.30	1.35	0.48	0.68	1.01	1.27	1.93	2.52	99.1		
KU-1836-042	42.0	0.42	5.1	1.10	1.15	1.20	1.25	1.30	1.35	0.51	0.73	1.08	1.36	2.07	2.69	106.7		
KU-1836-045	45.0	0.45	5.3	1.10	1.15	1.20	1.25	1.30	1.35	0.54	0.77	1.15	1.45	2.20	2.86	114.3		
KU-1836-048	48.0	0.48	5.5	1.10	1.15	1.20	1.25	1.30	1.35	0.57	0.82	1.21	1.53	2.33	3.03	121.9		
KU-1836-054	54.0	0.54	5.8	1.10	1.15	1.20	1.25	1.30	1.35	0.63	0.91	1.35	1.70	2.59	3.37	137.2		
KU-1836-060	60.0	0.60	6.1	1.10	1.15	1.20	1.25	1.30	1.35	0.69	1.00	1.48	1.87	2.85	3.71	152.4		
KU-1836-066	66.0	0.66	6.5	1.10	1.15	1.20	1.25	1.30	1.35	0.75	1.09	1.62	2.04	3.12	4.06	167.6		
KU-1836-072	72.0	0.72	6.8	1.10	1.15	1.20	1.25	1.30	1.35	0.81	1.18	1.75	2.21	3.38	4.40	182.9		
KU-1836-084	84.0	0.84	7.5	1.10	1.15	1.20	1.25	1.30	1.35	0.93	1.36	2.02	2.56	3.91	5.08	213.4		
KU-1836-096	96.0	0.96	8.2	1.10	1.15	1.20	1.25	1.30	1.35	1.08	1.54	2.29	2.90	4.43	5.77	243.8		
KU-1836-099	99.0	0.99	8.4	1.10	1.15	1.20	1.25	1.30	1.35	1.09	1.58	2.35	2.98	4.56	5.94	251.5		

MAXIMUM SPECIFICATIONS ARE PRODUCED TO INCLUDE MEASURING STEM UNCERTAINTY.

NOTE: PRODUCED TO SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.

PRODUCED TO SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CORRECTION FACTOR FOR PRODUCED TO CHARACTERISTICS AT OTHER CONDITIONS.

VISIT OUR WEB SITE AT <http://www.tensolite.com>

TENSOLITE CABLE ASSEMBLY TECHNICAL DATA

ELECTRICAL SPECIFICATIONS

IMPEDANCE, NOMINAL:	50	OHMS
CAPACITANCE NOMINAL:	29.4	pf/FOOT
VELOCITY OF PROPAGATION, NOMINAL:	70.7	%
RELATIVE SHIELDING:	-100.0	dB MIN.
INSULATION RESISTANCE:	1000	MEGOHMS MIN.
DIELECTRIC WITHSTANDING VOLTAGE:	1000	VRMS MIN.
ELECTRICAL DELAY:	1.44	ns /FOOT
ELECTRICAL DELAY:	120	ps /INCH
P _{AV} USE RF POWER:	1250	WATTS
(INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)		

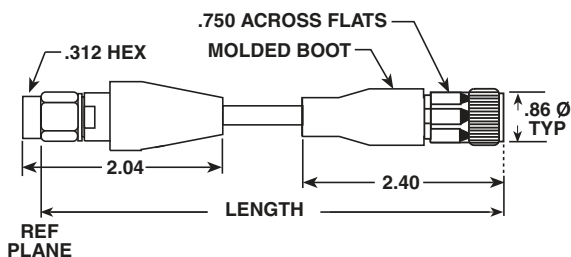
F (IN GHz)	1	2	4	6	12	18
MAX. CW WATTS →	50	40	20	18	15	10
PHASE STABILITY DEG.	0.3	0.6	1.2	1.8	3.6	5.4
LOSS STABILITY dB →	0.01	0.01	0.01	0.02	0.03	0.05
VSWR STABILITY →	LESS THAN 0.02 THROUGH 18 GHz.					

CABLE FORMED AND STRAIGHTENED 90 DEGREES ON A 4" RADIUS

MECHANICAL SPECIFICATIONS:

CABLE MAX. DIAMETER:	0.245	INCHES
MIN. ONE TIME BEND RADIUS:	1.00	INCHES
FLEXED MIN. BEND RADIUS:	4.00	INCHES
CONNECTOR RETENTION:	100	POUNDS
TEMPERATURE RANGE:	-13 / +33	DEGREES C
SMA MATING TORQUE:	7-10	INCH POUNDS
7MM MATING TORQUE:	12-15	INCH POUNDS
CONNECTOR INTERFACES:	SMA TENSOLITE HYBRID SMA	

HYBRID SMA MALE TO 7MM CONNECTORS ON KU CABLE



MATERIALS AND FINISHES

DESCRIPTION	MATERIAL	FINISH OR COLOR
CABLE JACKET:	POLYVINYL CHLORIDE	BLACK
MARLE:	MIL-I-23053	WHITE
BOOTS:	MIL-I-23053	BLACK
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
CONTACTS:	ASTM B196 BeCu	MIL-G-45204 GOLD PLATED
SMA INSULATORS:	ASTM D1457 PTFE	NONE
7MM INSULATORS:	PPO	NONE
CONNECTOR BODIES:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
7MM BODIES:	ASTM B196 BeCu	MIL-G-45204 GOLD PLATED
CONNECTOR NUTS:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
GAS ET:	ZZ-R-765 SILICON RUBBER	NONE
SOLVENTS:	NO OZONE DEPLETING MATERIALS ARE USED.	

PART NUMBER	LENGTH INCHES	MAX. WEIGHT OUNCES	MAXIMUM M VSWR :1 AT FREQUENCY (IN GHz)							MAXIMUM M INSERTION LOSS IN dB AT FREQUENCY (IN GHz)						LENGTH CM
			1 TO 1	1 TO 2	2 TO 4	4 TO 6	6 TO 12	12 TO 18	1 TO 1	1 TO 2	2 TO 4	4 TO 6	6 TO 12	12 TO 18		
KU-3678-012	12.0	0.25	4.6	1.10	1.15	1.20	1.25	1.30	1.35	0.21	0.29	0.43	0.53	0.78	1.02	30.5
KU-3678-013	13.0	0.25	4.6	1.10	1.15	1.20	1.25	1.30	1.35	0.22	0.31	0.45	0.56	0.83	1.08	33.0
KU-3678-014	14.0	0.25	4.7	1.10	1.15	1.20	1.25	1.30	1.35	0.23	0.32	0.47	0.59	0.87	1.13	35.6
KU-3678-015	15.0	0.25	4.7	1.10	1.15	1.20	1.25	1.30	1.35	0.24	0.34	0.50	0.61	0.92	1.19	38.1
KU-3678-016	16.0	0.25	4.8	1.10	1.15	1.20	1.25	1.30	1.35	0.25	0.35	0.52	0.64	0.96	1.25	40.6
KU-3678-017	17.0	0.25	4.9	1.10	1.15	1.20	1.25	1.30	1.35	0.26	0.37	0.54	0.67	1.00	1.30	43.2
KU-3678-018	18.0	0.25	4.9	1.10	1.15	1.20	1.25	1.30	1.35	0.27	0.38	0.56	0.70	1.05	1.36	45.7
KU-3678-019	19.0	0.25	5.0	1.10	1.15	1.20	1.25	1.30	1.35	0.28	0.40	0.58	0.73	1.09	1.42	48.3
KU-3678-020	20.0	0.25	5.0	1.10	1.15	1.20	1.25	1.30	1.35	0.29	0.41	0.61	0.76	1.13	1.48	50.8
KU-3678-021	21.0	0.21	5.1	1.10	1.15	1.20	1.25	1.30	1.35	0.30	0.43	0.63	0.79	1.18	1.53	53.3
KU-3678-022	22.0	0.25	5.1	1.10	1.15	1.20	1.25	1.30	1.35	0.31	0.44	0.65	0.81	1.22	1.59	55.9
KU-3678-023	23.0	0.25	5.2	1.10	1.15	1.20	1.25	1.30	1.35	0.32	0.46	0.67	0.84	1.27	1.65	58.4
KU-3678-024	24.0	0.25	5.3	1.10	1.15	1.20	1.25	1.30	1.35	0.33	0.47	0.70	0.87	1.31	1.70	61.0
KU-3678-026	26.0	0.26	5.4	1.10	1.15	1.20	1.25	1.30	1.35	0.35	0.50	0.74	0.93	1.40	1.82	66.0
KU-3678-028	28.0	0.28	5.5	1.10	1.15	1.20	1.25	1.30	1.35	0.37	0.53	0.79	0.99	1.49	1.93	71.1
KU-3678-030	30.0	0.30	5.6	1.10	1.15	1.20	1.25	1.30	1.35	0.40	0.56	0.83	1.04	1.57	2.05	76.2
KU-3678-032	32.0	0.32	5.7	1.10	1.15	1.20	1.25	1.30	1.35	0.42	0.59	0.88	1.10	1.66	2.16	81.3
KU-3678-034	34.0	0.34	5.8	1.10	1.15	1.20	1.25	1.30	1.35	0.44	0.62	0.92	1.16	1.75	2.27	86.4
KU-3678-036	36.0	0.36	5.9	1.10	1.15	1.20	1.25	1.30	1.35	0.46	0.65	0.97	1.21	1.84	2.39	91.4
KU-3678-039	39.0	0.39	6.1	1.10	1.15	1.20	1.25	1.30	1.35	0.49	0.70	1.03	1.30	1.97	2.56	99.1
KU-3678-042	42.0	0.42	6.3	1.10	1.15	1.20	1.25	1.30	1.35	0.52	0.74	1.10	1.38	2.10	2.73	106.7
KU-3678-045	45.0	0.45	6.5	1.10	1.15	1.20	1.25	1.30	1.35	0.55	0.79	1.17	1.47	2.23	2.90	114.3
KU-3678-048	48.0	0.48	6.6	1.10	1.15	1.20	1.25	1.30	1.35	0.58	0.83	1.23	1.56	2.36	3.07	121.9
KU-3678-054	54.0	0.54	7.0	1.10	1.15	1.20	1.25	1.30	1.35	0.64	0.92	1.37	1.73	2.63	3.41	137.2
KU-3678-060	60.0	0.60	7.3	1.10	1.15	1.20	1.25	1.30	1.35	0.70	1.01	1.50	1.90	2.89	3.76	152.4
KU-3678-072	72.0	0.72	8.0	1.10	1.15	1.20	1.25	1.30	1.35	0.82	1.19	1.77	2.24	3.42	4.44	182.9
KU-3678-084	84.0	0.84	8.7	1.10	1.15	1.20	1.25	1.30	1.35	0.94	1.37	2.04	2.58	3.94	5.13	213.4
KU-3678-096	96.0	0.96	9.4	1.10	1.15	1.20	1.25	1.30	1.35	1.07	1.55	2.31	2.92	4.47	5.81	243.8
KU-3678-099	99.0	0.99	9.6	1.10	1.15	1.20	1.25	1.30	1.35	1.10	1.60	2.37	3.01	4.60	5.98	251.5

MAXIMUM M SPECIFICATIONS ARE PRODUCED AT MAXIMUM M INCLUDING MEASURING STEM UNCERTAINTY.
 NOTE: PRODUCT SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.
 PRODUCT SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CORRECTION FACTOR FOR PRODUCT CHARACTERISTICS AT OTHER CONDITIONS.
 VISIT OUR WEB SITE AT <http://www.tensolite.com>

Test Cables

TENSOLITE CABLE ASSEMBLY TECHNICAL DATA

ELECTRICAL SPECIFICATIONS

IMPEDANCE, NOMINAL:	50	OHMS
CAPACITANCE NOMINAL:	29.4	pf/FOOT
VELOCITY OF PROPAGATION, NOMINAL:	70.7	%
RELATIVE SHIELDING:	-100.0	dB MIN.
INSULATION RESISTANCE:	1000	MEG OHMS MIN.
DIELECTRIC WITHSTANDING VOLTAGE:	1000	VRMS MIN.
ELECTRICAL DELAY, NOMINAL:	1.44	ns /FOOT
ELECTRICAL DELAY, NOMINAL:	120	ps /INCH
PULSE RF POWER:	1250	WATTS

(INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)

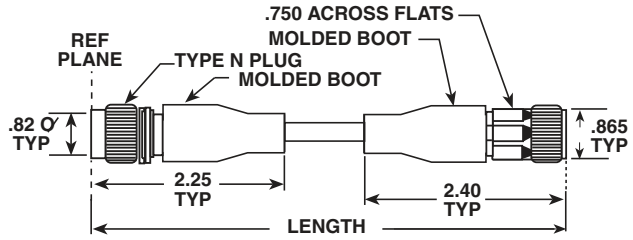
F (IN GHz) →	1	2	4	6	12	18
MAX. CW WATTS →	50	40	20	18	15	10
PHASE STABILITY DEG.	0.3	0.6	1.2	1.8	3.6	5.4
LOSS STABILITY dB →	0.01	0.01	0.01	0.02	0.03	0.05
VSWR STABILITY →	LESS THAN 0.02 THROUGH 18 GHz.					

CABLE FORMED AND STRAIGHTENED 90 DEGREES ON A 4" RADIUS

MECHANICAL SPECIFICATIONS:

CABLE MAX. DIAMETER:	0.245	INCHES
MIN. ONE TIME BEND RADIUS:	1.00	INCHES
FLEXED MIN. BEND RADIUS:	4.00	INCHES
CONNECTOR RETENTION:	100	POUNDS MIN.
TEMPERATURE RANGE:	-13 / +33	DEGREES C
MATING TORQUE, E:	10-15	INCH POUNDS
7MM MATING TORQUE, E:	12-15	INCH POUNDS
CONNECTOR INTERFACES:	N. MIL-STD-348 (SOLID) 7MM. IEEE287	

TYPE N MALE TO 7MM CONNECTORS ON KU CABLE



MATERIALS AND FINISHES

DESCRIPTION	MATERIAL	FINISH OR COLOR
CABLE JACKETS:	POLYVINYLCHLORIDE	BLACK
MARBERS:	MIL-I-23053	WHITE
BOOTS:	MIL-I-23053	BLACK
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
CONTACTS:	ASTM B196 BeCu	MIL-G-45204 GOLD PLATED
TYPEN INSULATORS:	ASTM D1457 PTFE	NONE
7MM INSULATORS:	PPO	NONE
CONNECTOR BODIES:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
7MM BODY:	ASTM B196 BeCu	MIL-G-45204 GOLD PLATED
CONNECTOR NUTS:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
GASET:	ZZ-R-765 SILICON RUBBER	NONE
SOLVENTS:	NO OZONE DEPLETING MATERIALS ARE USED.	

PART NUMBER	LENGTH INCHES	CABLE LENGTH	MAX. WEIGHT OUNCES	MAXIMUM VSWR :1 AT FREQ. ENC. (IN GHz.)								MAXIMUM INSERTION LOSS IN dB AT FREQ. (IN GHz.)						LENGTH CM
				1 TO 1	1 TO 2	2 TO 4	4 TO 6	6 TO 12	12 TO 18	1 TO 1	1 TO 2	2 TO 4	4 TO 6	6 TO 12	12 TO 18			
KU-1878-012	12.0	0.25	4.6	1.10	1.15	1.20	1.25	1.30	1.35	0.23	0.32	0.47	0.58	0.85	1.10	30.5		
KU-1878-013	13.0	0.25	4.6	1.10	1.15	1.20	1.25	1.30	1.35	0.24	0.34	0.49	0.61	0.90	1.16	33.0		
KU-1878-014	14.0	0.25	4.7	1.10	1.15	1.20	1.25	1.30	1.35	0.25	0.35	0.51	0.64	0.94	1.22	35.6		
KU-1878-015	15.0	0.25	4.7	1.10	1.15	1.20	1.25	1.30	1.35	0.26	0.37	0.54	0.66	0.98	1.28	38.1		
KU-1878-016	16.0	0.25	4.8	1.10	1.15	1.20	1.25	1.30	1.35	0.27	0.38	0.56	0.69	1.03	1.33	40.6		
KU-1878-017	17.0	0.25	4.9	1.10	1.15	1.20	1.25	1.30	1.35	0.28	0.40	0.58	0.72	1.07	1.39	43.2		
KU-1878-018	18.0	0.25	4.9	1.10	1.15	1.20	1.25	1.30	1.35	0.29	0.41	0.60	0.75	1.12	1.45	45.7		
KU-1878-019	19.0	0.25	5.0	1.10	1.15	1.20	1.25	1.30	1.35	0.30	0.43	0.62	0.78	1.16	1.50	48.3		
KU-1878-020	20.0	0.25	5.0	1.10	1.15	1.20	1.25	1.30	1.35	0.31	0.44	0.65	0.81	1.20	1.56	50.8		
KU-1878-021	21.0	0.21	5.1	1.10	1.15	1.20	1.25	1.30	1.35	0.32	0.46	0.67	0.83	1.25	1.62	53.3		
KU-1878-022	22.0	0.25	5.1	1.10	1.15	1.20	1.25	1.30	1.35	0.33	0.47	0.69	0.86	1.29	1.67	55.9		
KU-1878-023	23.0	0.25	5.2	1.10	1.15	1.20	1.25	1.30	1.35	0.34	0.49	0.71	0.89	1.34	1.73	58.4		
KU-1878-024	24.0	0.25	5.3	1.10	1.15	1.20	1.25	1.30	1.35	0.35	0.50	0.74	0.92	1.38	1.79	61.0		
KU-1878-026	26.0	0.26	5.4	1.10	1.15	1.20	1.25	1.30	1.35	0.37	0.53	0.78	0.98	1.47	1.90	66.0		
KU-1878-028	28.0	0.28	5.5	1.10	1.15	1.20	1.25	1.30	1.35	0.39	0.56	0.83	1.03	1.56	2.02	71.1		
KU-1878-030	30.0	0.30	5.6	1.10	1.15	1.20	1.25	1.30	1.35	0.42	0.59	0.87	1.09	1.64	2.13	76.2		
KU-1878-032	32.0	0.32	5.7	1.10	1.15	1.20	1.25	1.30	1.35	0.44	0.62	0.92	1.15	1.73	2.24	81.3		
KU-1878-034	34.0	0.34	5.8	1.10	1.15	1.20	1.25	1.30	1.35	0.46	0.65	0.96	1.21	1.82	2.36	86.4		
KU-1878-036	36.0	0.36	5.9	1.10	1.15	1.20	1.25	1.30	1.35	0.48	0.68	1.01	1.26	1.91	2.47	91.4		
KU-1878-039	39.0	0.39	6.1	1.10	1.15	1.20	1.25	1.30	1.35	0.51	0.73	1.07	1.35	2.04	2.64	99.1		
KU-1878-042	42.0	0.42	6.3	1.10	1.15	1.20	1.25	1.30	1.35	0.54	0.77	1.14	1.43	2.17	2.82	106.7		
KU-1878-045	45.0	0.45	6.5	1.10	1.15	1.20	1.25	1.30	1.35	0.57	0.82	1.21	1.52	2.30	2.99	114.3		
KU-1878-048	48.0	0.48	6.6	1.10	1.15	1.20	1.25	1.30	1.35	0.60	0.86	1.27	1.60	2.43	3.16	121.9		
KU-1878-054	54.0	0.54	7.0	1.10	1.15	1.20	1.25	1.30	1.35	0.66	0.95	1.41	1.78	2.70	3.50	137.2		
KU-1878-060	60.0	0.60	7.3	1.10	1.15	1.20	1.25	1.30	1.35	0.72	1.04	1.54	1.95	2.96	3.84	152.4		
KU-1878-072	72.0	0.72	8.0	1.10	1.15	1.20	1.25	1.30	1.35	0.84	1.22	1.81	2.29	3.48	4.53	182.9		
KU-1878-084	84.0	0.84	8.7	1.10	1.15	1.20	1.25	1.30	1.35	0.96	1.40	2.08	2.63	4.01	5.21	213.4		
KU-1878-096	96.0	0.96	9.4	1.10	1.15	1.20	1.25	1.30	1.35	1.09	1.58	2.35	2.97	4.54	5.90	243.8		
KU-1878-099	99.0	0.99	9.6	1.10	1.15	1.20	1.25	1.30	1.35	1.12	1.63	2.41	3.06	4.67	6.07	251.5		

MAXIMUM VSWR SPECIFICATIONS ARE PRODUCTION MAXIMUM INCLUDING MEASUREMENT UNCERTAINTY.

NOTE: PRODUCTION SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.

PRODUCTION SPECIFICATIONS APPLIED AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CONSISTENT FACTOR FOR PRODUCTION CHARACTERISTICS AT OTHER CONDITIONS.

VISIT OUR WEB SITE AT <http://www.tensolite.com>

TENSOLITE CABLE ASSEMBLY TECHNICAL DATA

ELECTRICAL SPECIFICATIONS

IMPEDANCE, NOMINAL:	50	OHMS
CAPACITANCE NOMINAL:	29.4	pf/FOOT
VELOCITY OF PROPAGATION, NOMINAL:	70.7	%
RELATIVE SHIELDING:	-100.0	dB MIN.
INSULATION RESISTANCE:	1000	MEGOHMS MIN.
DIELECTRIC WITHSTANDING VOLTAGE:	1000	VRMS MIN.
ELECTRICAL DELAY, NOMINAL:	1.44	ns /FOOT
ELECTRICAL DELAY, NOMINAL:	120	ps /INCH
POSSIBLE RF POWER:	1250	WATTS

(INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)

F (IN GHz) →	1	2	4	12	18
MAX. CW WATTS →	50	40	20	15	10
PHASE STABILITY, DEG.	0.3	0.6	1.2	3.6	5.4
LOSS STABILITY, dB →	0.01	0.01	0.01	0.03	0.05

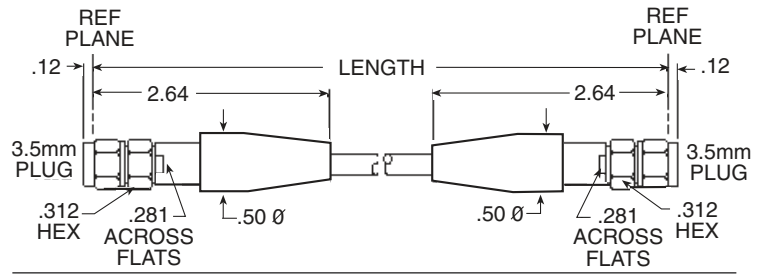
SWR STABILITY → LESS THAN 0.02 THROUGH 18 GHz.

CABLE FORMED AND STRAIGHTENED 90 DEGREES ON A 4" RADIUS

MECHANICAL SPECIFICATIONS:

CABLE MAX. DIAMETER:	0.200	INCHES
MIN. ONE TIME BEND RADIUS:	1.00	INCHES
PREFERRED BEND RADIUS:	4.00	INCHES
CONNECTOR RETENTION:	100	POUNDS NDS MIN.
TEMPERATURE RANGE:	-13 / + 33	DEGREES C
MATING TORQUE:	7-10	INCH POUNDS NDS
CONNECTOR INTERFACE:	3.5 MM	

KU CABLE ASSEMBLIES WITH 3.5 MM MALE CONNECTORS



MATERIALS AND FINISHES

DESCRIPTION	MATERIAL	FINISH OR COLOR
CABLE JACKET:	LP-389 FEP	BROWN TINT
CABLE SLEEVE:	POLYVINYLCHLORIDE	GREEN
BOOTS:	RUBBER COMPOUND	GREEN
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
CONTACTS:	ASTM B196 BeCu	MIL-G-45204 GOLD PLATED
INSULATORS:	ASTM D1457 PTFE	NONE
CONNECTOR BODIES:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
CONNECTOR NUTS:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
GASKETS:	ZZ-R-765 SILICON RUBBER	RED

SOLVENTS: NO OZONE DEPLETING MATERIALS ARE USED.

PART NUMBER	LENGTH		LENGTH	MAX. WEIGHT OUNCES	MAXIMUM VSWR :1 AT FREQUENCY (IN GHz)						MAXIMUM INSERTION LOSS IN dB AT FREQUENCY (IN GHz)						LENGTH CM
	FT	INCHES			1 TO 2	2 TO 4	4 TO 6	6 TO 12	12 TO 18	1 TO 2	2 TO 4	4 TO 6	6 TO 12	12 TO 18			
KU-7272-012	1	12.0	0.25	3.7	1.10	1.15	1.20	1.25	1.30	0.30	0.42	0.52	0.76	0.98	30.5		
KU-7272-018		18.0	0.25	4.0	1.10	1.15	1.20	1.25	1.30	0.39	0.55	0.70	1.02	1.32	45.7		
KU-7272-024	2	24.0	0.25	4.4	1.10	1.15	1.20	1.25	1.30	0.48	0.69	0.87	1.29	1.66	61.0		
KU-7272-030		30.0	0.25	4.7	1.10	1.15	1.20	1.25	1.30	0.57	0.82	1.04	1.55	2.00	76.2		
KU-7272-034		34.0	0.34	4.9	1.10	1.15	1.20	1.25	1.30	0.63	0.91	1.15	1.72	2.23	86.4		
KU-7272-036	3	36.0	0.36	5.0	1.10	1.15	1.20	1.25	1.30	0.66	0.96	1.21	1.81	2.35	91.4		
KU-7272-039		39.0	0.39	5.2	1.10	1.15	1.20	1.25	1.30	0.70	1.02	1.29	1.94	2.52	99.1		
KU-7272-042		42.0	0.42	5.4	1.10	1.15	1.20	1.25	1.30	0.75	1.09	1.38	2.08	2.69	106.7		
KU-7272-048	4	48.0	0.48	5.7	1.10	1.15	1.20	1.25	1.30	0.84	1.22	1.55	2.34	3.03	121.9		
KU-7272-054		54.0	0.54	6.1	1.10	1.15	1.20	1.25	1.30	0.93	1.36	1.72	2.60	3.37	137.2		
KU-7272-060	5	60.0	0.60	6.4	1.10	1.15	1.20	1.25	1.30	1.02	1.49	1.89	2.86	3.71	152.4		
KU-7272-072	6	72.0	0.72	7.1	1.10	1.15	1.20	1.25	1.30	1.20	1.76	2.23	3.39	4.40	182.9		
KU-7272-084	7	84.0	0.84	7.8	1.10	1.15	1.20	1.25	1.30	1.38	2.03	2.58	3.92	5.08	213.4		
KU-7272-096	8	96.0	0.96	8.5	1.10	1.15	1.20	1.25	1.30	1.56	2.30	2.92	4.44	5.77	243.8		
KU-7272-120	10	120.0	1.20	9.9	1.10	1.15	1.20	1.25	1.30	1.92	2.83	3.60	5.50	7.14	304.8		
KU-7272-144	12	144.0	1.44	11.2	1.15	1.20	1.25	1.30	1.35	2.28	3.37	4.29	6.55	8.51	365.8		
KU-7272-168	14	166.0	1.66	12.6	1.15	1.20	1.25	1.30	1.35	2.64	3.91	4.97	7.60	9.87	426.7		
KU-7272-180	15	180.4	1.80	13.3	1.15	1.20	1.25	1.30	1.35	2.82	4.18	5.32	8.14	10.58	458.1		

MAXIMUM SPECIFICATIONS ARE PROVIDED. MAXIMUM INCLUDING MEASURING SYSTEM UNCERTAINTY.

NOTE: PROVIDED SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.

PROVIDED SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CORRECTION FACTOR FOR PROVIDED CHARACTERISTICS AT OTHER CONDITIONS.

TENSOLITE CABLE ASSEMBLY TECHNICAL DATA

ELECTRICAL SPECIFICATIONS

IMPEDANCE, NOMINAL:	50	OHMS
CAPACITANCE NOMINAL:	29.4	pf/FOOT
VELOCITY OF PROPAGATION, NOMINAL:	70.7	%
RELATIVE SHIELDING:	-100.0	dB MIN.
INSULATION RESISTANCE:	1000	MEGOHMS MIN.
DIELECTRIC WITHSTANDING VOLTAGE:	1000	VRMS MIN.
ELECTRICAL DELAY, NOMINAL:	1.44	ns /FOOT
ELECTRICAL DELAY, NOMINAL:	120	ps /INCH
PLUSE RF POWER:	1250	WATTS

(INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)

F (IN GHz) →	1	2	4	6	12	18
MAX. CW WATTS →	50	40	20	18	15	10
PHASE STABILITY, DEG.	0.3	0.6	1.2	1.8	3.6	5.4
LOSS STABILITY, dB →	0.01	0.01	0.01	0.02	0.03	0.05

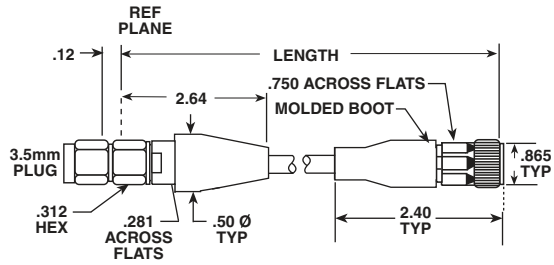
LESS THAN 0.02 THRU 18 GHz.

CABLE FORMED AND STRAIGHTENED 90 DEGREES ON A 4" RADIUS

MECHANICAL SPECIFICATIONS:

CABLE MAX. DIAMETER:	0.245	INCHES
MIN. ONE TIME BEND RADIUS:	1.00	INCHES
FLEXED MIN. BEND RADIUS:	4.00	INCHES
CONNECTOR RETENTION:	100	POUNDS MIN.
TEMPERATURE RANGE:	-13 / .33	DEGREES C
3.5 MM MATING TORQUE:	7-10	INCH POUNDS
7MM MATING TORQUE:	12-15	INCH POUNDS
CONNECTOR INTERFACES:	3.5 MM	7MM. IEEE 287

3.5 MM MALE TO 7MM CONNECTORS ON KU CABLE



MATERIALS AND FINISHES

DESCRIPTION	MATERIAL	FINISH OR COLOR
CABLE JACKET:	POLYVINYLCHLORIDE	BLACK
MARKEER:	MIL-I-23053	WHITE
BOOTS:	MIL-I-23053	BLACK
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
CONTACTS:	ASTM B196 BeCu	MIL-G-45204 GOLD PLATED
INSULATORS:	PPO	NONE
CONNECTOR BODIES:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
CONNECTOR NUTS:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
7 MM BODY:	ASTM B196 BeCu	MIL-G-45204 GOLD PLATED
7 MM NUT:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
GASKET:	ZZ-R-765 SILICON RUBBER	NONE
SOLVENTS:	NO OZONE DEPLETING MATERIALS ARE USED.	

PART NUMBER	LENGTH INCHES	WEIGHT OUNCES	MAX. WEIGHT OUNCES	MAXIMUM VSWR :1 AT FREQUENCIES (IN GHz.)							MAXIMUM INSERTION LOSS IN dB AT FREQ. (IN GHz.)						LENGTH CM
				1 TO 1	1 TO 2	2 TO 4	4 TO 6	6 TO 12	12 TO 18	1 TO 1	1 TO 2	2 TO 4	4 TO 6	6 TO 12	12 TO 18		
KU-7278-012	12.0	0.25	4.2	1.10	1.15	1.20	1.25	1.32	1.38	0.22	0.31	0.45	0.55	0.82	1.06	30.5	
KU-7278-013	13.0	0.25	4.2	1.10	1.15	1.20	1.25	1.32	1.38	0.23	0.32	0.47	0.58	0.86	1.12	33.0	
KU-7278-014	14.0	0.25	4.3	1.10	1.15	1.20	1.25	1.32	1.38	0.24	0.34	0.49	0.61	0.91	1.18	35.6	
KU-7278-015	15.0	0.25	4.4	1.10	1.15	1.20	1.25	1.32	1.38	0.25	0.35	0.52	0.64	0.95	1.23	38.1	
KU-7278-016	16.0	0.25	4.4	1.10	1.15	1.20	1.25	1.32	1.38	0.26	0.37	0.54	0.67	0.99	1.29	40.6	
KU-7278-017	17.0	0.25	4.5	1.10	1.15	1.20	1.25	1.32	1.38	0.27	0.38	0.56	0.70	1.04	1.35	43.2	
KU-7278-018	18.0	0.25	4.5	1.10	1.15	1.20	1.25	1.32	1.38	0.28	0.40	0.58	0.72	1.08	1.40	45.7	
KU-7278-019	19.0	0.25	4.6	1.10	1.15	1.20	1.25	1.32	1.38	0.29	0.41	0.60	0.75	1.13	1.46	48.3	
KU-7278-020	20.0	0.25	4.6	1.10	1.15	1.20	1.25	1.32	1.38	0.30	0.43	0.63	0.78	1.17	1.52	50.8	
KU-7278-021	21.0	0.21	4.7	1.10	1.15	1.20	1.25	1.32	1.38	0.31	0.44	0.65	0.81	1.21	1.57	53.3	
KU-7278-022	22.0	0.25	4.8	1.10	1.15	1.20	1.25	1.32	1.38	0.32	0.46	0.67	0.84	1.26	1.63	55.9	
KU-7278-023	23.0	0.25	4.8	1.10	1.15	1.20	1.25	1.32	1.38	0.33	0.47	0.69	0.87	1.30	1.69	58.4	
KU-7278-024	24.0	0.25	4.9	1.10	1.15	1.20	1.25	1.32	1.38	0.34	0.49	0.72	0.90	1.34	1.75	61.0	
KU-7278-026	26.0	0.26	5.0	1.10	1.15	1.20	1.25	1.32	1.38	0.36	0.52	0.76	0.95	1.43	1.86	66.0	
KU-7278-028	28.0	0.28	5.1	1.10	1.15	1.20	1.25	1.32	1.38	0.38	0.55	0.81	1.01	1.52	1.97	71.1	
KU-7278-030	30.0	0.30	5.2	1.10	1.15	1.20	1.25	1.32	1.38	0.41	0.58	0.85	1.07	1.61	2.09	76.2	
KU-7278-032	32.0	0.32	5.3	1.10	1.15	1.20	1.25	1.32	1.38	0.43	0.61	0.90	1.12	1.70	2.20	81.3	
KU-7278-034	34.0	0.34	5.4	1.10	1.15	1.20	1.25	1.32	1.38	0.45	0.64	0.94	1.18	1.78	2.32	86.4	
KU-7278-036	36.0	0.36	5.6	1.10	1.15	1.20	1.25	1.32	1.38	0.47	0.67	0.99	1.24	1.87	2.43	91.4	
KU-7278-039	39.0	0.39	5.7	1.10	1.15	1.20	1.25	1.32	1.38	0.50	0.71	1.05	1.32	2.00	2.60	99.1	
KU-7278-042	42.0	0.42	5.9	1.10	1.15	1.20	1.25	1.32	1.38	0.53	0.76	1.12	1.41	2.13	2.77	106.7	
KU-7278-045	45.0	0.45	6.1	1.10	1.15	1.20	1.25	1.32	1.38	0.56	0.80	1.19	1.49	2.27	2.94	114.3	
KU-7278-048	48.0	0.48	6.2	1.10	1.15	1.20	1.25	1.32	1.38	0.59	0.85	1.25	1.58	2.40	3.11	121.9	
KU-7278-054	54.0	0.54	6.6	1.10	1.15	1.20	1.25	1.32	1.38	0.65	0.94	1.39	1.75	2.66	3.46	137.2	
KU-7278-060	60.0	0.60	6.9	1.10	1.15	1.20	1.25	1.32	1.38	0.71	1.03	1.52	1.92	2.92	3.80	152.4	
KU-7278-072	72.0	0.72	7.6	1.10	1.15	1.20	1.25	1.32	1.38	0.83	1.21	1.79	2.26	3.45	4.48	182.9	
KU-7278-084	84.0	0.84	8.3	1.10	1.15	1.20	1.25	1.32	1.38	0.95	1.39	2.06	2.61	3.98	5.17	213.4	
KU-7278-096	96.0	0.96	9.0	1.10	1.15	1.20	1.25	1.32	1.38	1.08	1.57	2.33	2.95	4.50	5.85	243.8	
KU-7278-099	99.0	0.99	9.2	1.10	1.15	1.20	1.25	1.32	1.38	1.11	1.61	2.39	3.03	4.63	6.02	251.5	

MAXIMUM VSWR SPECIFICATIONS ARE PRODUCT MAXIMUM VSWR INCLUDING MEASURING SYSTEM UNCERTAINTY.

NOTE: PRODUCT SPECIFICATIONS ARE VERIFIED AT 73 DEG. F. SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.

PRODUCT SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CONSTANT FACTOR FOR PRODUCT CHARACTERISTICS AT OTHER CONDITIONS.

VISIT OUR WEB SITE AT <http://www.tensolite.com>

TENSOLITE CABLE ASSEMBLY TECHNICAL DATA

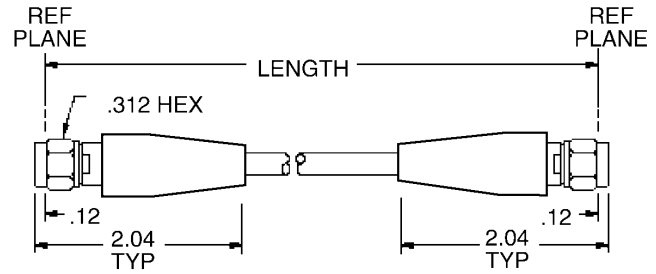
ELECTRICAL SPECIFICATIONS

IMPEDANCE, NOMINAL:	50	OHMS				
CAPACITANCE NOMINAL:	29.4	pf/FOOT				
VELOCITY OF PROPAGATION, NOMINAL:	70.7	%				
RELATIVE SHIELDING:	-100.0	dB MIN.				
INSULATION RESISTANCE:	1000	MEGOHMS MIN.				
DIELECTRIC WITHSTANDING VOLTAGE:	1000	VRMS MIN.				
ELECTRICAL DELAY, NOMINAL:	1.44	ns /FOOT				
ELECTRICAL DELAY, NOMINAL:	120	ps /INCH				
PO LSE RF POWER:	1250	WATTS				
(INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)						
F (IN GHz) →	1	2	4	12	18	26.5
MAX. CW WATTS →	50	40	20	15	10	8
PHASE STABILITY, DEG.	0.3	0.6	1.2	3.6	5.4	8.0
LOSS STABILITY, dB →	0.01	0.01	0.01	0.03	0.05	0.08
VSWR STABILITY →	LESS THAN 0.02 THROUGH 26.5GHz.					
CABLE FORMED AND STRAIGHTENED 90 DEGREES ON A 4" RADIUS						

MECHANICAL SPECIFICATIONS:

CABLE MAX. DIAMETER:	0.200	INCHES
MIN. ONE TIME BEND RADIUS:	1.00	INCHES
PREFERRED BEND RADIUS:	4.00	INCHES
CONNECTOR RETENTION:	100	POUNDS MIN.
TEMPERATURE RANGE:	-13 / +33	DEGREES C
MATING TORQUE:	7-10	INCH POUNDS
CONNECTOR INTERFACES: TENSOLITE HYBRID SMA MIL-STD-348		

K CABLE ASSEMBLIES WITH QMI HYBRID SMA MALE CONNECTORS



MATERIALS AND FINISHES

DESCRIPTION	MATERIAL	FINISH OR COLOR
CABLE JACK, ET:	LP-389 FEP	BROWN TINT
CABLE SLEEVE:	POLYVINYLCHLORIDE	GREEN
BOOTS:	RUBBER COMPOUND	GREEN
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
CONTACTS:	ASTM B196 BeCu	MIL-G-45204 GOLD PLATED
INSULATORS:	ASTM D1457 PTFE	NONE
CONNECTOR BODIES:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
CONNECTOR NUTS:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
GAS, ET:	ZZ-R-765 SILICON RUBBER	RED
CABLE IDENTIFICATION LABEL MARKING:	POLYVINYLCHLORIDE	YELLOW
SOLVENTS: NO OZONE DEPLETING MATERIALS ARE USED.		

PART NUMBER	LENGTH INCHES	TOLERANCE	MAX. WEIGHT OUNCES	MAXIMUM VSWR :1 AT FREQ. (IN GHz.)							MAXIMUM INSERTION LOSS IN dB AT FREQ. (IN GHz.)							LENGTH CM
				1 TO 2	2 TO 4	4 TO 6	6 TO 12	12 TO 18	18 TO 26.5	1 TO 2	2 TO 4	4 TO 6	6 TO 12	12 TO 18	18 TO 26.5			
K-3636-006	6.0	±0.25	3.3	1.10	1.15	1.20	1.25	1.30	1.35	0.21	0.28	0.35	0.50	0.63	0.80	15.2		
K-3636-007	7.0	±0.25	3.4	1.10	1.15	1.20	1.25	1.30	1.35	0.23	0.31	0.38	0.54	0.69	0.87	17.8		
K-3636-012	12.0	±0.25	3.7	1.10	1.15	1.20	1.25	1.30	1.35	0.30	0.42	0.52	0.76	0.98	1.24	30.5		
K-3636-018	18.0	±0.25	4.0	1.10	1.15	1.20	1.25	1.30	1.35	0.39	0.55	0.70	1.02	1.32	1.69	45.7		
K-3636-024	24.0	±0.25	4.4	1.10	1.15	1.20	1.25	1.30	1.35	0.48	0.69	0.87	1.29	1.66	2.13	61.0		
K-3636-030	30.0	±0.25	4.7	1.10	1.15	1.20	1.25	1.30	1.35	0.57	0.82	1.04	1.55	2.00	2.57	76.2		
K-3636-036	36.0	±0.36	5.0	1.10	1.15	1.20	1.25	1.30	1.35	0.66	0.96	1.21	1.81	2.35	3.02	91.4		
K-3636-039	39.4	±0.39	5.2	1.10	1.15	1.20	1.25	1.30	1.35	0.71	1.03	1.30	1.96	2.54	3.27	100.0		
K-3636-040	40.0	±0.40	5.3	1.10	1.15	1.20	1.25	1.30	1.35	0.72	1.04	1.32	1.99	2.57	3.31	101.5		
K-3636-042	42.0	±0.42	5.4	1.10	1.15	1.20	1.25	1.30	1.35	0.75	1.09	1.38	2.08	2.69	3.46	106.7		
K-3636-048	48.0	±0.48	5.7	1.10	1.15	1.20	1.25	1.30	1.35	0.84	1.22	1.55	2.34	3.03	3.91	121.9		
K-3636-054	54.0	±0.54	6.1	1.10	1.15	1.20	1.25	1.30	1.35	0.93	1.36	1.72	2.60	3.37	4.35	137.2		
K-3636-060	60.0	±0.60	6.4	1.10	1.15	1.20	1.25	1.30	1.35	1.02	1.49	1.89	2.86	3.71	4.79	152.4		
K-3636-072	72.0	±0.72	7.1	1.10	1.15	1.20	1.25	1.30	1.35	1.20	1.76	2.23	3.39	4.40	5.68	182.9		
K-3636-084	84.0	±0.84	7.8	1.10	1.15	1.20	1.25	1.30	1.35	1.38	2.03	2.58	3.92	5.08	6.57	213.4		
K-3636-096	96.0	±0.96	8.5	1.10	1.15	1.20	1.25	1.30	1.35	1.56	2.30	2.92	4.44	5.77	7.45	243.8		
K-3636-108	108.0	±1.08	9.2	1.10	1.15	1.20	1.25	1.30	1.35	1.74	2.57	3.26	4.97	6.45	8.34	274.3		
K-3636-120	120.0	±1.20	9.9	1.10	1.15	1.20	1.25	1.30	1.35	1.92	2.83	3.60	5.50	7.14	9.23	304.8		
K-3636-144	144.0	±1.44	11.2	1.15	1.20	1.25	1.30	1.35	1.45	2.28	3.37	4.29	6.55	8.51	11.00	365.8		
K-3636-168	168.0	±1.68	12.6	1.15	1.20	1.25	1.30	1.35	1.45	2.64	3.91	4.97	7.60	9.87	12.77	426.7		
K-3636-180	180.4	±1.80	13.3	1.15	1.20	1.25	1.30	1.35	1.45	2.82	4.18	5.32	8.14	10.58	13.69	458.1		

MAXIMUM SPECIFICATIONS ARE PRODUCT MAXIMUM INCLUDING MEASURING SYSTEM UNCERTAINTY.

PRODUCT SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.

PRODUCT SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CONSTANT FACTOR FOR PRODUCT CHARACTERISTICS AT OTHER CONDITIONS.

VISIT OUR WEB SITE AT <http://www.tensolite.com>

Test Cables

TENSOLITE CABLE ASSEMBLY TECHNICAL DATA

ELECTRICAL SPECIFICATIONS

IMPEDANCE, NOMINAL:	50	OHMS
CAPACITANCE NOMINAL:	29.4	pf/FOOT
VELOCITY OF PROPAGATION, NOMINAL:	70.7	%
RELATIVE SHIELDING:	-100.0	dB MIN.
INSULATION RESISTANCE:	1000	MEGOHMS MIN.
DIELECTRIC WITHSTANDING VOLTAGE:	1000	VRMS MIN.
ELECTRICAL DELAY, NOMINAL:	1.44	ns /FOOT
ELECTRICAL DELAY, NOMINAL:	120	ps /INCH
P ₀ USE RF POWER:	1250	WATTS
(INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)		

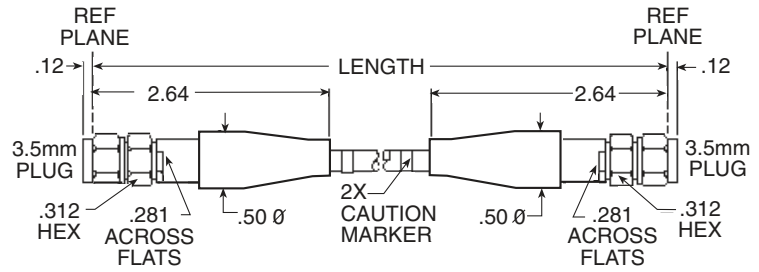
F (IN GHz) →	1	2	4	12	18	26.5
MAX. CW WATTS →	50	40	20	15	10	8
PHASE STABILITY, DEG.	0.3	0.6	1.2	3.6	5.4	8.0
LOSS STABILITY, dB →	0.01	0.01	0.01	0.03	0.05	0.08

SWR STABILITY → LESS THAN 0.02 THROUGH 26.5GHz.
 CABLE FORMED AND STRAIGHTENED 90 DEGREES ON A 4" RADIUS

MECHANICAL SPECIFICATIONS:

CABLE MAX. DIAMETER:	0.200	INCHES
MIN. ONE TIME BEND RADIUS:	1.00	INCHES
PREFERRED BEND RADIUS:	4.00	INCHES
CONNECTOR RETENTION:	100	POUNDS NDS MIN.
TEMPERATURE RANGE:	-13 / + 33	DEGREES C
MATING TORQUE:	7-10	INCH POUNDS NDS
CONNECTOR INTERFACE:	3.5 MM	

K CABLE ASSEMBLIES WITH 3.5 MM MALE CONNECTORS



MATERIALS AND FINISHES

DESCRIPTION	MATERIAL	FINISH OR COLOR
CABLE JACKET:	LP-389 FEP	BROWN TINT
CABLE SLEEVE:	POLYVINYLCHLORIDE	GREEN
BOOTS:	FLUOROPOLYMER	GREEN
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
CONTACTS:	ASTM B196 BeCu	MIL-G-45204 GOLD PLATED
INSULATORS:	ASTM D1457 PTFE	NONE
CONNECTOR BODIES:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
CONNECTOR NUTS:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
GAS, ET:	ZZ-R-765 SILICON FLUORIDE	RED
CABLE LABEL MARKING:	POLYVINYLCHLORIDE	YELLOW

SOLVENTS: NO OZONE DEPLETING MATERIALS ARE USED.

PART NUMBER	LENGTH INCHES	WEIGHT OUNCES	MAX. WEIGHT OUNCES	MAXIMUM SWR: 1 AT FREQUENCY (IN GHz.)							MAXIMUM INSERTION LOSS IN dB AT FREQUENCY (IN GHz.)							LENGTH CM
				1 TO 2	2 TO 4	4 TO 6	6 TO 12	12 TO 18	18 TO 26.5	1 TO 2	2 TO 4	4 TO 6	6 TO 12	12 TO 18	18 TO 26.5			
K-7272-006	6.0	0.25	3.3	1.10	1.15	1.20	1.25	1.30	1.35	0.21	0.28	0.35	0.50	0.63	0.80	15.2		
K-7272-012	12.0	0.25	3.7	1.10	1.15	1.20	1.25	1.30	1.35	0.30	0.42	0.52	0.76	0.98	1.24	30.5		
K-7272-018	18.0	0.25	4.0	1.10	1.15	1.20	1.25	1.30	1.35	0.39	0.55	0.70	1.02	1.32	1.69	45.7		
K-7272-024	24.0	0.25	4.4	1.10	1.15	1.20	1.25	1.30	1.35	0.48	0.69	0.87	1.29	1.66	2.13	61.0		
K-7272-030	30.0	0.25	4.7	1.10	1.15	1.20	1.25	1.30	1.35	0.57	0.82	1.04	1.55	2.00	2.57	76.2		
K-7272-036	36.0	0.36	5.0	1.10	1.15	1.20	1.25	1.30	1.35	0.66	0.96	1.21	1.81	2.35	3.02	91.4		
K-7272-039	39.4	0.39	5.2	1.10	1.15	1.20	1.25	1.30	1.35	0.71	1.03	1.30	1.96	2.54	3.27	100.0		
K-7272-040	40.0	0.40	5.3	1.10	1.15	1.20	1.25	1.30	1.35	0.72	1.04	1.32	1.99	2.57	3.31	101.5		
K-7272-042	42.0	0.42	5.4	1.10	1.15	1.20	1.25	1.30	1.35	0.75	1.09	1.38	2.08	2.69	3.46	106.7		
K-7272-048	48.0	0.48	5.7	1.10	1.15	1.20	1.25	1.30	1.35	0.84	1.22	1.55	2.34	3.03	3.91	121.9		
K-7272-054	54.0	0.54	6.1	1.10	1.15	1.20	1.25	1.30	1.35	0.93	1.36	1.72	2.60	3.37	4.35	137.2		
K-7272-060	60.0	0.60	6.4	1.10	1.15	1.20	1.25	1.30	1.35	1.02	1.49	1.89	2.86	3.71	4.79	152.4		
K-7272-072	72.0	0.72	7.1	1.10	1.15	1.20	1.25	1.30	1.35	1.20	1.76	2.23	3.39	4.40	5.68	182.9		
K-7272-084	84.0	0.84	7.8	1.10	1.15	1.20	1.25	1.30	1.35	1.38	2.03	2.58	3.92	5.08	6.57	213.4		
K-7272-096	96.0	0.96	8.5	1.10	1.15	1.20	1.25	1.30	1.35	1.56	2.30	2.92	4.44	5.77	7.45	243.8		
K-7272-108	108.0	1.08	9.2	1.10	1.15	1.20	1.25	1.30	1.35	1.74	2.57	3.26	4.97	6.45	8.34	274.3		
K-7272-120	120.0	1.20	9.9	1.10	1.15	1.20	1.25	1.30	1.35	1.92	2.83	3.60	5.50	7.14	9.23	304.8		
K-7272-144	144.0	1.44	11.2	1.15	1.20	1.25	1.30	1.35	1.45	2.28	3.37	4.29	6.55	8.51	11.00	365.8		
K-7272-168	168.0	1.68	12.6	1.15	1.20	1.25	1.30	1.35	1.45	2.64	3.91	4.97	7.60	9.87	12.77	426.7		
K-7272-180	180.4	1.80	13.3	1.15	1.20	1.25	1.30	1.35	1.45	2.82	4.18	5.32	8.14	10.58	13.69	458.1		

MAXIMUM SPECIFICATIONS ARE PRODUCTION MAXIMUM INCLUDING MEASUREMENT UNCERTAINTY.

NOTE: PRODUCTION SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.

PRODUCTION SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CONSTRUCTION FACTOR FOR PRODUCTION CHARACTERISTICS AT OTHER CONDITIONS.

VISIT OUR WEB SITE AT <http://www.tensolite.com>

TENSOLITE CABLE ASSEMBLY TECHNICAL DATA

ELECTRICAL SPECIFICATIONS

IMPEDANCE, NOMINAL:	50	OHMS
CAPACITANCE NOMINAL:	29.4	pf/FOOT
VELOCITY OF PROPAGATION, NOMINAL:	70.7	%
RELATIVE SHIELDING:	-100.0	dB MIN.
INSULATION RESISTANCE:	1000	MEGOHMS MIN.
DIELECTRIC WITHSTANDING VOLTAGE:	1000	VRMS MIN.
ELECTRICAL DELAY, NOMINAL:	1.44	ns /FOOT
ELECTRICAL DELAY, NOMINAL:	120	ps /INCH
POSSIBLE RF POWER:	1250	WATTS

(INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)

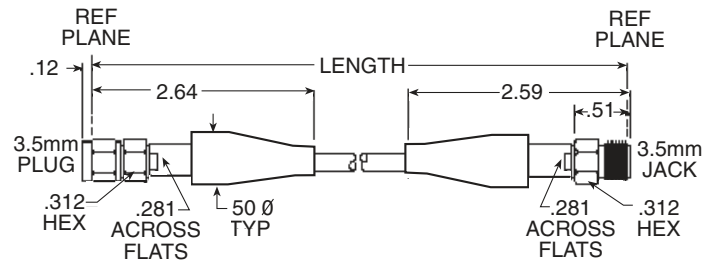
F (IN GHz) →	1	2	4	12	18	26.5
MAX. CW WATTS →	50	40	20	15	10	8
PHASE STABILITY, DEG.	0.3	0.6	1.2	3.6	5.4	8.0
LOSS STABILITY, dB →	0.01	0.01	0.01	0.03	0.05	0.08
VSWR STABILITY →	LESS THAN 0.02 THRU 26.5GHz.					

CABLE FORMED AND STRAIGHTENED 90 DEGREES ON A 4" RADIUS

MECHANICAL SPECIFICATIONS:

CABLE MAX. DIAMETER:	0.200	INCHES
MIN. ONE TIME BEND RADIUS:	1.00	INCHES
PREFERRED BEND RADIUS:	4.00	INCHES
CONNECTOR RETENTION:	100	POUNDS MIN.
TEMPERATURE RANGE:	-13 / +33	DEGREES C
MATING TORQUE:	7-10	INCH POUNDS
CONNECTOR INTERFACE:	3.5 MM	

K CABLE ASSEMBLIES WITH 3.5 MM MALE TO 3.5 MM FEMALE CONNECTORS



MATERIALS AND FINISHES

DESCRIPTION	MATERIAL	FINISH OR COLOR
CABLE JACKET:	LP-389 FEP	BROWN TINT
CABLE SLEEVE:	POLYVINYLCHLORIDE	GREEN
BOOTS:	RUBBER COMPOUND	GREEN
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
CONTACTS:	ASTM B196 BeCu	MIL-G-45204 GOLD PLATED
INSULATORS:	ASTM D1457 PTFE	NONE
CONNECTOR BODIES:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
CONNECTOR NUTS:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
GAS: ET:	ZZ-R-765 SILICON RUBBER	RED

SOLVENTS: NO OZONE DEPLETING MATERIALS ARE USED.

PART NUMBER	LENGTH INCHES	LENGTH	MAX. WEIGHT OUNCES	MAXIMUM VSWR :1 AT FREQUENCY (IN GHz.)								MAXIMUM INSERTION LOSS IN dB AT FREQUENCY (IN GHz.)								LENGTH CM
				0.5 TO 2	2 TO 4	4 TO 6	6 TO 12	12 TO 18	18 TO 26.5	0.5 TO 2	2 TO 4	4 TO 6	6 TO 12	12 TO 18	18 TO 26.5					
K-7274-007	7.0	0.25	3.4	1.10	1.15	1.20	1.25	1.30	1.35	0.23	0.31	0.38	0.54	0.69	0.87	17.8				
K-7274-012	12.0	0.25	3.7	1.10	1.15	1.20	1.25	1.30	1.35	0.30	0.42	0.52	0.76	0.98	1.24	30.5				
K-7274-013	13.0	0.25	3.7	1.10	1.15	1.20	1.25	1.30	1.35	0.32	0.44	0.55	0.80	1.03	1.32	33.0				
K-7274-019	19.0	0.25	4.1	1.10	1.15	1.20	1.25	1.30	1.35	0.41	0.57	0.72	1.07	1.38	1.76	48.3				
K-7274-025	25.0	0.25	4.4	1.10	1.15	1.20	1.25	1.30	1.35	0.50	0.71	0.90	1.33	1.72	2.21	63.5				
K-7274-031	31.0	0.31	4.8	1.10	1.15	1.20	1.25	1.30	1.35	0.59	0.84	1.07	1.59	2.06	2.65	78.7				
K-7274-034	34.4	0.34	4.9	1.10	1.15	1.20	1.25	1.30	1.35	0.64	0.92	1.16	1.74	2.25	2.90	87.3				
K-7274-035	35.0	0.35	5.0	1.10	1.15	1.20	1.25	1.30	1.35	0.65	0.93	1.18	1.77	2.29	2.94	88.9				
K-7274-037	37.0	0.37	5.1	1.10	1.15	1.20	1.25	1.30	1.35	0.67	0.98	1.24	1.86	2.40	3.09	94.0				
K-7274-043	43.0	0.43	5.4	1.10	1.15	1.20	1.25	1.30	1.35	0.76	1.11	1.41	2.12	2.74	3.54	109.2				
K-7274-049	49.0	0.49	5.8	1.10	1.15	1.20	1.25	1.30	1.35	0.85	1.25	1.58	2.38	3.09	3.98	124.5				
K-7274-055	55.0	0.55	6.1	1.10	1.15	1.20	1.25	1.30	1.35	0.94	1.38	1.75	2.65	3.43	4.42	139.7				
K-7274-067	67.0	0.67	6.8	1.10	1.15	1.20	1.25	1.30	1.35	1.12	1.65	2.09	3.17	4.11	5.31	170.2				
K-7274-079	79.0	0.79	7.5	1.10	1.15	1.20	1.25	1.30	1.35	1.30	1.92	2.43	3.70	4.80	6.20	200.7				
K-7274-091	91.0	0.91	8.2	1.10	1.15	1.20	1.25	1.30	1.35	1.48	2.19	2.78	4.22	5.48	7.08	231.1				
K-7274-103	103.0	1.03	8.9	1.10	1.15	1.20	1.25	1.30	1.35	1.66	2.45	3.12	4.75	6.17	7.97	261.6				
K-7274-115	115.0	1.15	9.6	1.10	1.15	1.20	1.25	1.30	1.35	1.84	2.72	3.46	5.28	6.85	8.86	292.1				
K-7274-139	139.0	1.39	10.9	1.15	1.20	1.25	1.30	1.35	1.45	2.20	3.26	4.14	6.33	8.22	10.63	353.1				
K-7274-163	163.0	1.63	12.3	1.15	1.20	1.25	1.30	1.35	1.45	2.56	3.80	4.83	7.38	9.59	12.40	414.0				
K-7274-175	175.4	1.75	13.0	1.15	1.20	1.25	1.30	1.35	1.45	2.75	4.07	5.18	7.92	10.30	13.32	445.4				

MAXIMUM SPECIFICATIONS ARE PRODUCTION INCLUDING MEASUREMENT UNCERTAINTY.

NOTE: PRODUCTION SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.

PRODUCTION SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CONSIDER FACTOR FOR PRODUCTION CHARACTERISTICS AT OTHER CONDITIONS.

VISIT OUR WEBSITE AT <http://www.tensolite.com>

TENSOLITE CABLE ASSEMBLY TECHNICAL DATA

K CABLE ASSEMBLIES WITH 3.5 MM FEMALE CONNECTORS

ELECTRICAL SPECIFICATIONS

IMPEDANCE, NOMINAL:	50 OHMS
CAPACITANCE NOMINAL:	29.4 pF/FOOT
VELOCITY OF PROPAGATION, NOMINAL:	70.7 %
RELATIVE SHIELDING:	-100.0 dB MIN.
INSULATION RESISTANCE:	1000 MEGOHMS MIN.
DIELECTRIC WITHSTANDING VOLTAGE:	1000 VRMS MIN.
ELECTRICAL DELAY, NOMINAL:	1.44 ns /FOOT
ELECTRICAL DELAY, NOMINAL:	120 ps /INCH
P ₀ LSE RF POWER:	1250 WATTS

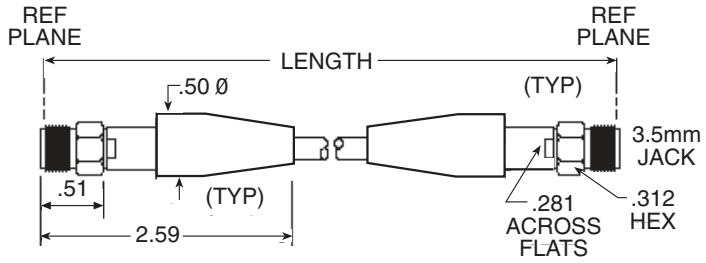
(INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)

F (IN GHz) →	1	2	4	12	18	26.5
MAX. CW WATTS →	50	40	20	15	10	8
PHASE STABILITY DEG.	0.3	0.6	1.2	3.6	5.4	8.0
LOSS STABILITY dB →	0.01	0.01	0.01	0.03	0.05	0.08
VSWR STABILITY →	LESS THAN 0.02 THROUGH 26.5GHz.					

CABLE FORMED AND STRAIGHTENED 90 DEGREES ON A 4" RADIUS

MECHANICAL SPECIFICATIONS:

CABLE MAX. DIAMETER:	0.200 INCHES
MIN. ONE TIME BEND RADIUS:	1.00 INCHES
PREFERRED BEND RADIUS:	4.00 INCHES
CONNECTOR RETENTION:	100 POUNDS MIN.
TEMPERATURE RANGE:	-13 / +33 DEGREES C
MATING TORQUE:	7-10 INCH POUNDS
CONNECTOR INTERFACE:	3.5 MM



MATERIALS AND FINISHES

DESCRIPTION	MATERIAL	FINISH OR COLOR
CABLE JACK, ET:	LP-389 FEP	BROWN TINT
CABLE SLEEVE:	POLYVINYLCHLORIDE	GREEN
BOOTS:	RUBBER COMPOUND	GREEN
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
CONTACTS:	ASTM B196 BeCu	MIL-G-45204 GOLD PLATED
INSULATORS:	ASTM D1457 PTFE	NONE
CONNECTOR BODIES:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
CONNECTOR NUTS:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
GAS, ET:	ZZ-R-765 SILICON RUBBER	RED

SOLVENTS: NO OZONE DEPLETING MATERIALS ARE USED.
CABLES FORMED AT THE SPECIFIED BEND RADIUS MEET SPECIFICATIONS DETAILED HEREIN

Test Cables

PART NUMBER	LENGTH INCHES	LENGTH	MAX. WEIGHT OUNCES	MAXIMUM VSWR :1 AT FREQUENCY (IN GHz.)						MAXIMUM INSERTION LOSS IN dB AT FREQUENCY (IN GHz.)						LENGTH CM
				1 TO 2	2 TO 4	4 TO 6	6 TO 12	12 TO 18	18 TO 26.5	1 TO 2	2 TO 4	4 TO 6	6 TO 12	12 TO 18	18 TO 26.5	
κ-7474-012	12.0	0.25	3.7	1.10	1.15	1.20	1.25	1.30	1.35	0.30	0.42	0.52	0.76	0.98	1.24	30.5
κ-7474-018	18.0	0.25	4.0	1.10	1.15	1.20	1.25	1.30	1.35	0.39	0.55	0.70	1.02	0.32	0.69	45.7
κ-7474-024	24.0	0.25	4.4	1.10	1.15	1.20	1.25	1.30	1.35	0.48	0.69	0.87	1.29	1.66	2.13	61.0
κ-7474-030	30.0	0.25	4.7	1.10	1.15	1.20	1.25	1.30	1.35	0.57	0.82	1.04	1.55	2.00	2.57	76.2
κ-7474-036	36.0	0.36	5.0	1.10	1.15	1.20	1.25	1.30	1.35	0.66	0.96	1.21	1.81	2.35	3.02	91.4
κ-7474-039	39.4	0.39	5.2	1.10	1.15	1.20	1.25	1.30	1.35	0.71	1.03	1.30	1.96	2.54	3.27	100.0
κ-7474-042	42.0	0.42	5.4	1.10	1.15	1.20	1.25	1.30	1.35	0.75	1.09	1.38	2.08	2.69	3.46	106.7
κ-7474-048	48.0	0.48	5.7	1.10	1.15	1.20	1.25	1.30	1.35	0.84	1.22	1.55	2.34	3.03	3.91	121.9
κ-7474-054	54.0	0.54	6.1	1.10	1.15	1.20	1.25	1.30	1.35	0.93	1.36	1.72	2.60	3.37	4.35	137.2
κ-7474-060	60.0	0.60	6.4	1.10	1.15	1.20	1.25	1.30	1.35	1.02	1.49	1.89	2.86	3.71	4.79	152.4
κ-7474-072	72.0	0.72	7.1	1.10	1.15	1.20	1.25	1.30	1.35	1.20	1.76	2.23	3.39	4.40	5.68	182.9
κ-7474-084	84.0	0.84	7.8	1.10	1.15	1.20	1.25	1.30	1.35	1.38	2.03	2.58	3.92	5.08	6.57	213.4
κ-7474-096	96.0	0.96	8.5	1.10	1.15	1.20	1.25	1.30	1.35	1.56	2.30	2.92	4.44	5.77	7.45	243.8
κ-7474-108	108.0	1.08	9.2	1.10	1.15	1.20	1.25	1.30	1.35	1.74	2.57	3.26	4.97	6.45	8.34	274.3
κ-7474-120	120.0	1.20	9.9	1.10	1.15	1.20	1.25	1.30	1.35	1.92	2.83	3.60	5.50	7.14	9.23	304.8
κ-7474-144	144.0	1.44	11.2	1.15	1.20	1.25	1.30	1.35	1.45	2.28	3.37	4.29	6.55	8.51	11.00	365.8
κ-7474-168	168.0	1.68	12.6	1.15	1.20	1.25	1.30	1.35	1.45	2.64	3.91	4.97	7.60	9.87	12.77	426.7
κ-7474-180	180.0	1.80	13.3	1.15	1.20	1.25	1.30	1.35	1.45	2.82	4.18	5.31	8.13	10.56	13.66	457.2

MAXIMUM SPECIFICATIONS ARE PRODUCT MAXIMUM INCLUDING MEASUREMENT UNCERTAINTY.

NOTE: PRODUCT SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.

PRODUCT SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CONDUCTION FACTOR. FOR PRODUCT CHARACTERISTICS AT OTHER CONDITIONS.

VISIT OUR WEB SITE AT <http://www.tensolite.com>

**FOR ADDITIONAL CATALOGS
CALL "THE CATALOG REQUEST LINE"
1-800-362-3539**

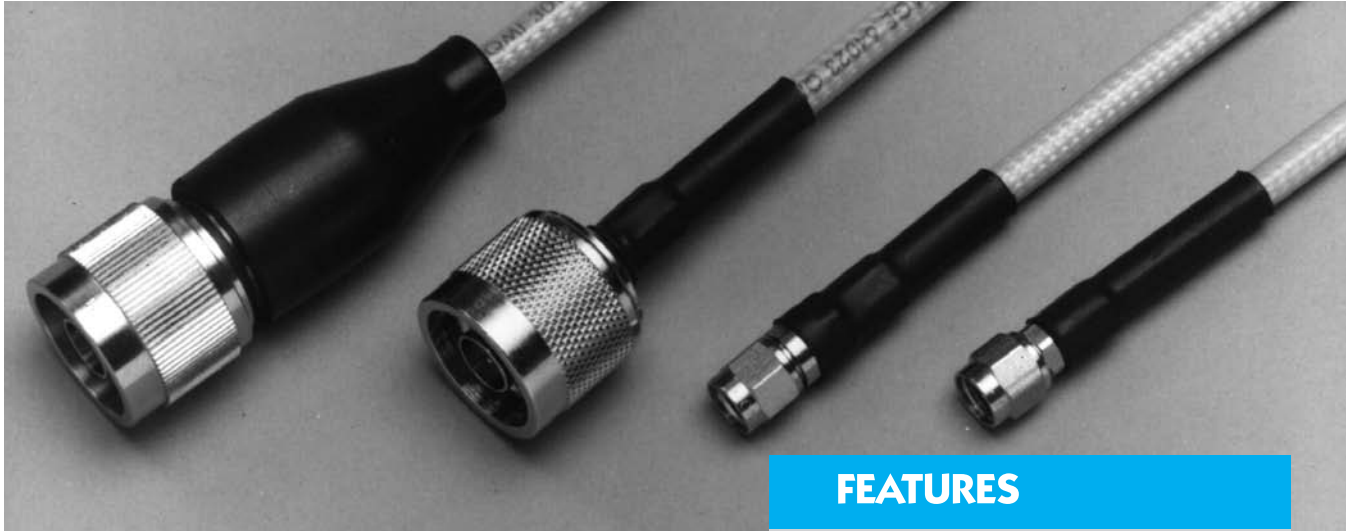
**CALL 1-800-362-FLEX
FOR ADDITIONAL INFORMATION**

**CHECK OUT TENSOLITE'S WEB SITE:
www.tensolite.com**

EMAIL US AT rfmicrowave@tensolite.com

FAX: 360-759-4016

LOW COST, LOW LOSS 18 GHz “301” CABLE ASSEMBLIES



FEATURES

DESCRIPTION

Tensolite’s newly developed *LOW COST, LOW LOSS* “301” cable ends the 3-way compromise users face when defining insertion loss for higher frequency, flexible cable assemblies. Historically low loss meant high price or reduced flexibility. “301” cable is a microporous PTFE design in .200” diameter that offers all three advantages: low loss, low price and excellent flexibility.

“301” *LOW COST, LOW LOSS* assemblies help the designer achieve system performance goals while retaining the flexibility of braided cables. Alternatively, “301” cables may be used to replace .141” diameter semi-rigid or .250” diameter corrugated copper cables.

APPLICATIONS

- Small/weak signal situations
- Transmit/Receive systems
- Performance upgrades
- Cost reduction efforts
- Replacing semi-rigid or .250” corrugated

- Low insertion loss
- Microporous PTFE dielectric
- Low unit price
- Increased flexibility
- Available with Type N or SMA connectors
- Triple shielded
- Selected lengths in stock for immediate delivery

Tensolite RF/Microwave Interconnects 1-800-362-FLEX

A CARLISLE Company

Website: www.tensolite.com

**FOR ADDITIONAL CATALOGS
CALL "THE CATALOG REQUEST LINE"
1-800-362-3539**

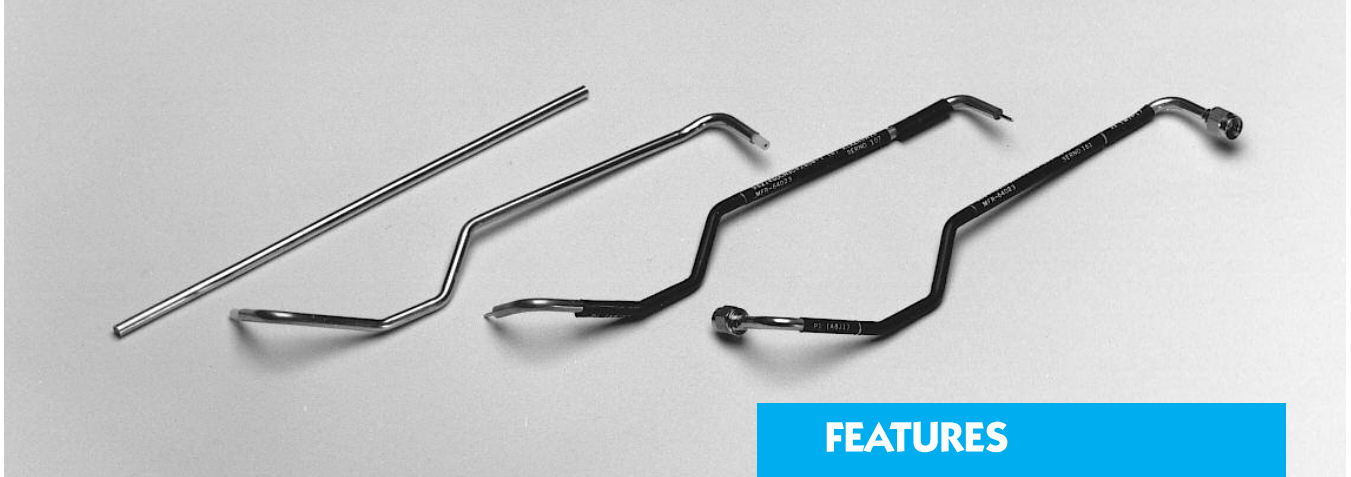
**CALL 1-800-362-FLEX
FOR ADDITIONAL INFORMATION**

**CHECK OUT TENSOLITE'S WEB SITE:
www.tensolite.com**

EMAIL US AT rfmicrowave@tensolite.com

FAX: 360-759-4016

CUSTOM BUILT SEMI-RIGID CABLE ASSEMBLIES



FEATURES

DESCRIPTION

Tensolite's semi-rigid cable assemblies are among the highest quality assemblies available today. We **custom build** these cables to your specifications. Upon request we will offer suggestions for materials and forming to meet specific goals.

Tensolite uses only the highest quality MIL spec semi-rigid cable. An infinite variety of commercial, QPL, and custom connectors are available including our own high performance SMA's. All soldering is done in a **MIL-STD-2000** environment by certified assemblers. We maintain a MIL-I-45208A inspection system with the calibration, sampling procedures and documentation to meet your most demanding requirements.

APPLICATIONS

- Military or Commercial O.E.M.
- Test equipment
- High shielding environments
- Low cost RF transmission needs

- MIL-STD-2000 certified assemblers
- Computerized forming equipment
- In-house test capability through 50 GHz
- Tight phase matching capability
- Large selection of cable sizes, material options and connectors
- Custom marking
- Rapid delivery

Tensolite RF/Microwave Interconnects 1-800-362-FLEX

A **CARLISLE** Company

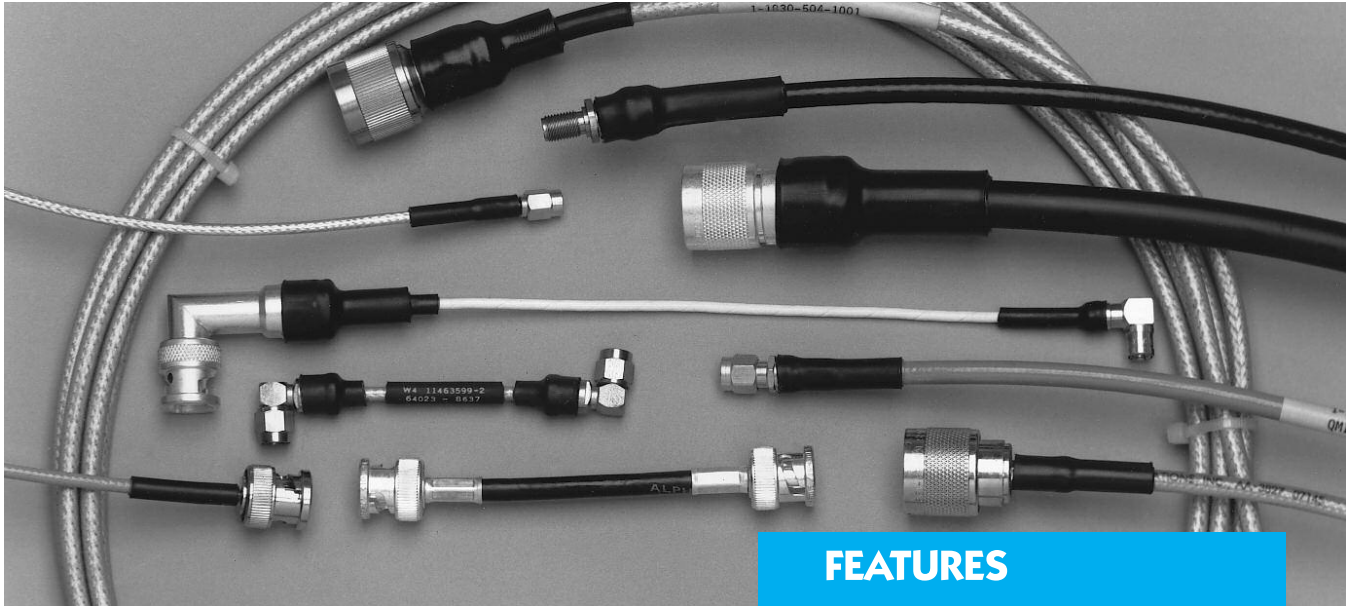
Website: www.tensolite.com

M17# or other#	Nom. O.D. (inches)	Operating Frequency		Power Handling @Max MILSpec Freq. (Watts)	Maximum Attenuation (db/100 FT)							Dielectric Material	Jacket Material	Center Conductor Material	Minimum Inside Bend Radius (inches)	Continuous Working Voltage	Withstanding Voltage (RMS)	Operating Temp. Range(°C)
		MIL Spec. Max.	90% Cut Off		500 MHz	1 GHz	3 GHz	5 GHz	10 GHz	18 GHz	20 GHz							
/151-00001 696	.047	20	109	6.5	28	40	70	90	130	180	190	PTFE	COPPER	SPCW*	.125	1000	2000	-40 to +100
					28	40	70	90	130	180	190							
/133-RG405 & /133-00006 ²	.085	20	61	20	15	22	38	50	80	122	130	PTFE	COPPER	SPCW*	.125	1500	5000	-40 to +125
					15	22	38	50	80	122	130							
/133-00002 & /133-00008 ²	.085	20	61	20	15	22	38	50	80	122	130	PTFE	COPPER	SPC**	.125	1500	5000	-40 to +125
					15	22	38	50	80	122	130							
/130-RG402 & /130-00004 ²	.141	20	34	70	8	12	21	29	45	62	70	PTFE	COPPER	SPCW*	.250	1900	5000	-40 to +125
					8	12	21	29	45	62	70							
/129-RG401	.250	18	19	200	5.1	7.5	11	16	33	48		PTFE	COPPER	SPC**	3000	7500	-40 to +90	
					5.1	7.5	11	16	33	48								

Follow these guidelines for the best performing lowest cost and shortest lead time assemblies:

- A. DIMENSIONS**
Drawing layout should be in absolute XYZ format with one connector interface reference plane the 0,0,0 point from which all subsequent measurements are made. This eliminates a build up of tolerances.
- B. TOLERANCES**
0-4" lengths: ±0.03
4-12" lengths: ±0.05
>12" lengths: ±(0.05) x (length)
Example: A cable with two bends and three legs 3", 5", and 10" long would have leg tolerances of ±.03", ±.05", and ±.09" respectively. The furthest end of the 10" leg length is 18" from the 0,0,0 point.
- C. BENDS**
For best performance do not exceed the minimum inside bend radii specified in the table above. To allow optimum use of computerized forming equipment and eliminate tooling:
1. Use the same radius dimension within a given assembly.
2. Do not specify a radius greater than 0.5".
3. Allow a minimum .150" of straight cable between bends.
- D. MARKERS**
Use commonly available MIL spec or commercial shrink marker material in high contrast black with white characters, two lines/marker maximum. Wrap markers are less costly on small quantity, quick delivery orders. Avoid serialization and one-of-a-kind markers.
- E. CONNECTORS**
Specify SMA plugs whenever possible. Tensolite's SMA's easily out perform most SMA's available today. Avoid unusual connector designs as well as unpopular items such as bulkheads or panel mounts. Allow "equivalents" to increase the probability of availability or lower costs.
¹Other cable diameters and material plating options exist. Consult Tensolite for more information.
²Soft annealed copper jacket.
- F. CABLE**
Semi-rigid cable is available in standard as well as soft copper outer jackets. One may choose from a wide assortment of jacket and center conductor platings. A selection of the more popular options are listed above. If no requirement other than O.D. is specified, Tensolite uses soft jacketed, steel center conductor cable.
- G. DRAWINGS**
Ensure drawings are complete with all dimensions, views, materials, tolerances, proper scale, electrical and environmental requirements. Obtain from Tensolite a special part number uniquely assigned to your print before releasing the final document.
- H. PACKAGING**
Unless otherwise specified cables are individually sealed in plastic bags, wrapped in wadding and sealed in heavy duty outer containers to prevent damage during shipping.
Remember, these are just guidelines. If you must exceed them consult Tensolite for more information.

RF/MICROWAVE CABLE ASSEMBLIES



FEATURES

DESCRIPTION

Tensolite's 3000 series cable assemblies are designed with the goal of cost effectiveness while continuing to provide the quality and workmanship for which we are best known.

These assemblies are available using almost ANY MIL-C-17 flexible cable and many custom cables, a selection of which is listed on the next page. Tensolite uses commercially available crimp style, non-captive contact connectors. All finishes and dimensions are IAW MIL-C-39012. Attachment strain relief is achieved through the use of MIL-I-23053 shrink tubing.

APPLICATIONS

- O.E.M.
- Aftermarket replacement
- Within test equipment
- Between test equipment hook-up
- Commercial/Telecommunications

- Microwave frequency operation
- Highest quality commercial connectors
- MIL SPEC or custom cables
- Large selection
- Proven attachment methods
- Cost effective
- Quick delivery

Tensolite RF/Microwave Interconnects 1-800-362-FLEX

A CARLISLE Company

Website: www.tensolite.com

MECHANICAL AND ELECTRICAL SPECIFICATIONS OF MIL-C-17 FLEXIBLE CABLES & AMBIENT

M17# or other#	Assy Cable Code	Max. Operating Freq. (GHz)	Power Handling @Max. Freq. (Watts)	Maximum Attenuation (db/100 FT)								Dielectric Material	Jacket Material	Nom. O.D. (inches)	# of braids	Relative Shielding ¹ (db)	Minimum Bend Radius (inches)	Withstanding Voltage (RMS) ²	Operating Temp. Range(°C)	Cable/Connector Compatibility Guide					
				100 MHz	400 MHz	1 GHz	3 GHz	5 GHz	8 GHz	10 GHz	18 GHz									BNC	TNC	SMA	SSMA	SMB	SMC
/28-RG58	115	1.0	33.0	6.5	17.0	28.0						PE	PVC	0.195	1	40	1.0	5,000	-40 to +85	X	X	X			
/60-RG142	132	8.0	180.0	5.5	11.7	19.0	35.0	48.0	66.0			PTFE	FEP	0.195	2	60	1.0	5,000	-55 to +200	X	X	X			
/75-RG214	163	11.0	30.0	2.6	6.8	12.0	25.0	35.0	48.0	56.0		PE	PVC	0.425	2	60	2.0	10,000	-40 to +85	X	X	X			
/84-RG223	174	12.4	10.5	6.5	12.0	21.0	40.0	55.0	84.0	90.0		PE	PVC	0.212	2	60	1.0	5,000	-40 to +85	X	X	X			
/89-RG178	140	3.0	44.0	16.0	33.0	52.0	94.0	74.0				PTFE	FEP	0.071	1	40	0.4	5,000	-55 to +200	X	X	X	X	X	
/113-RG316	187	3.0	77.0	11.0	21.0	38.0	58.0					PTFE	FEP	0.098	1	40	0.5	2,000	-55 to +200	X	X	X	X	X	X
/128-RG400	190	12.4	144.0	4.5	10.5	17.0	38.0	50.0	66.0	78.0	88.0	PTFE	FEP	0.195	2	40	1.1	5,000	-55 to +200	X	X	X	X	X	X
/138-00001 (RG188A) Replaced with RG 316.																									
/152A Double braided RG316	195	12.4	37.0	9.3	19.0	30.8	55.6	73.9	106.2	110.0	122.4	PTFE	FEP	0.118	2	60	0.6	2,000	-55 to +200	X	X	X	X	X	X
SF142B	402	8.0	110.0	4.0	8.2	13.4	24.9	33.6	44.7	51.3	57.6	PTFE	FEP	0.195	2+	90	1.0	5,000	-55 to +200	X	X	X			
SF214	404	13.7	48.0	2.3	4.6	8.4	16.6	23.3	37.7	42.7		PE	PVC	0.425	2+	90	2.1	10,000	-55 to +80	X	X	X			
Custom cable	510	8.0	14.0	5.3	11.1	18.7	36.1	49.9	68.0			PE	PUR	0.212	2+	100	1.1	5,000	-65 to +80	X	X	X			
Custom cable	511	8.0	5.0	9.3	19.3	31.7	59.0	79.7	106.2			PE	PUR	0.119	2+	100	0.6	4,500	-65 to +80	X	X	X	X	X	X

How to Order:

Designate the desired assembly by choosing from the available cables above and connectors from the matrix to the far right. Insert the codes at the appropriate location as noted in the example. Connector codes should be listed in increasing numerical sequence. Contact Tensolite for cables and connectors not shown.

ABBREVIATIONS

- FEP Fluorinated ethylene propylene
- PE Polyethylene
- PFA Perfluoroalkoxy
- PTFE Polytetrafluoroethylene
- PUR Polyurethane
- PVC Polyvinylchloride

¹ Measured at 3 GHz, one foot sample.

² Typically limited to a lower value by connectors

CONNECTOR CODES

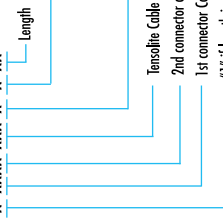
SERIES	CONFIGURATION			
	BNC	TNC	TYPE N	SMA
Plug	24	30	18	36
Right Angle Plug	25	31	19	37
Jack	26	32	20	38
Panel Jack	27	33	21	39
Bulkhead Jack	28	34	22	40
MAX. OPERATING FREQUENCY	4.0	11.0	11.0	12.4
			limited by cable	4.0
				10.0

All cable assemblies are labeled and 100% inspected to Tensolite's rigorous quality standards. Each item is tested for continuity, dielectric withstanding voltage and insulation resistance. The product is individually unit packaged and tagged for maximum protection and ease of identification.

Specify
⁰No microwave test req. (Typical assemblies 1GHz) or less
¹Reduced frequency microwave test requirement (Typically less than standard frequency of the cable and/or connectors used).
²Standard frequency microwave test requirement for the cable and/or connectors used.

ALL OTHER ASSEMBLIES

X-XXX-XX-X X XX



Specify
¹Specific customer requirement when no customer drawing specification is available
³Standard product
⁴Standard product with at least one captive interface

¹ if length is measured in inches (used if over 99")
² if length is measured in feet.

CHARACTERISTICS OF SELECTED CABLES FOR ASSEMBLIES
 FLEXIBLE CABLES SEMI-FLEX AND SEMI-RIGID CABLES

Assy Cable Code	140	187	195	511	115	174	190	510	132	428	300	163	402	504	600	678	617	606	601	618	676	602	
Cable Type	RG178	RG316	RG316	Ultra-Flex	RG58	RG223	RG400	Super-Flex	RG142	Low Loss	Low Cost, Low Loss	RG214	SF142	High Performance	SF214	Copper Jacketed Semi-Rigid	Aluminum Jacketed Semi-Rigid	Copper Low Loss Semi-Rigid	SEMI-FLEX	Aluminum Jacketed Semi-Rigid	Copper Jacketed Semi-Rigid	Low Loss Semi-Rigid	
Maximum Diameter	0.075	0.102	0.118	0.123	0.199	0.216	0.200	0.216	0.200	0.120	0.125	0.432	0.200	0.200	0.432	0.087	0.089	0.087	0.145	0.143	0.143	0.143	
MIL-C-17	/93G	/113C2	/152A		/28C	/84B	/128B1		/60C3			/75F				/133C					/130D		
Jacket	FEP	FEP	FEP	PUR	PE	PE	FEP	PUR	FEP	PTFE	FEP	PE	FEP	FEP	PE	Copper	Tin Plated Aluminum	Copper	Tin Dipped Wire	Tin Plated Aluminum	Copper	Copper	
Jacket Color	Brown	Brown	Brown	Grey	Black	Black	Brown	Grey	Brown	White	Green	Black	Brown	Brown	Black	Copper	Grey	Copper	Copper/Silver	Grey	Copper	Copper	
Bend Radius: Fixed One Time Minimum.	0.4	0.5	0.6	0.6	1.0	1.1	1.0	1.1	1.0	0.6	0.6	2.2	1.0	1.0	2.2				0.19	0.10	0.13	0.50	
Fixed One Time Preferred.	0.8	1.0	1.2	1.2	2.0	2.2	2.0	2.2	2.0	1.2	1.3	4.3	2.0	2.0	4.3				0.50	0.40	0.25	1.00	
Constant Flexing	1.5	2.0	2.4	2.5	4.0	4.3	4.0	4.3	4.0	2.4	2.5	8.6	4.0	4.0	8.6				1.00	2.00	2.82	5.64	
Minimum, No Mechanical Damage.																							
Minimum, No Electrical Change.																							
Multiple Flexes																							
Maximum Operating Temperature (Deg C)	200	200	200	80	85	85	200	80	200	200	200	85	200	200	80	125	125	200	200	125	125	200	
Minimum Operating Temperature (Deg C)	-55	-55	-65	-65	-40	-40	-55	-65	-55	-65	-65	-40	-55	-55	-65	-65	-40	-65	-70	-40	-65	-65	
Relative Shielding (db)	40	40	80	100	40	80	80	100	80	100	80	80	>90	>100	>90	>100	>100	>100	>100	>100	>100	>100	
Impedance (nom.)	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	
Capacitance p/ft. (nom.)	29.4	29.4	29.4	30.8	30.8	30.8	29.4	30.8	29.4	29.4	28.6	30.8	29.4	29.4	30.8	29.4	29.4	25.0	29.4	29.4	29.4	25.0	
Velocity of Propagation (nom.)	0.71	0.71	0.71	0.67	0.67	0.67	0.71	0.67	0.71	0.71	0.79	0.67	0.71	0.71	0.67	0.71	0.71	0.83	0.71	0.71	0.71	0.83	
Weight lbs/ft.	0.063	0.011	0.0168	0.009	0.024	0.037	0.045	0.038	0.043	0.012	0.03	0.119	0.043	0.038	0.133	0.014	0.008	0.029	0.027	0.0164	0.032	0.013	
Delay ns/ft.	1.44	1.44	1.44	1.53	1.53	1.53	1.44	1.53	1.44	1.44	1.29	1.53	1.44	1.44	1.53	1.44	1.44	1.22	1.44	1.44	1.44	1.22	
Delay ps/in.	120	120	120	127	127	127	120	127	120	120	107	127	120	120	127	120	120	120	102	120	120	102	
Inches per Degree at 1 GHz	0.023	0.023	0.023	0.022	0.022	0.022	0.023	0.022	0.023	0.023	0.026	0.022	0.023	0.023	0.022	0.023	0.023	0.027	0.023	0.023	0.023	0.027	

Tensolite RF/Microwave Interconnects 1-800-362-FLEX
 A CARLISLE Company Website: www.tensolite.com

**MAXIMUM INSERTION LOSS OF CABLES SORTED BY INSERTION LOSS (per 100 ft.)
FLEXIBLE CABLES**

Assy Cable Code	140	187	195	511	115	174	190	510	132	428	300	163	402	504	404	301
Cable Type	RG178	RG316	Double Braided RG316	Ultra-Flex	RG58	RG223	RG400	Super-Flex	RG142	Low Loss	Low Cost, Low Loss	RG214	SF142	High Performance	SF214	Low Cost, Low Loss
Maximum Diameter	0.075	0.102	0.118	0.123	0.199	0.216	0.200	0.216	0.200	0.120	0.125	0.432	0.200	0.200	0.432	0.200
MIL-C-17	/93G	/113C2	/152A		/28C	/84B	/128B1		/60C3			/75F				
Freq (GHz) 0.1	16.0	11.0	9.3	9.3	6.5	6.5	4.5	5.3	5.5	6.6	5.8	2.7	4.0	3.6	3.0	2.8
0.4	33.0	21.0	19.0	19.3	17.0	12.0	10.5	11.1	11.7	13.4	11.7	6.8	8.2	7.4	5.8	5.6
1.0	52.0	38.0	30.8	31.7	28.0	21.0	17.0	18.7	19.0	21.5	18.6	12.0	13.4	12.2	9.3	9.0
2.0	76.0	48.0	44.6	46.7		31.0	28.0	28.1	29.0	30.9	26.6	18.0	19.7	18.0	13.7	12.8
3.0	94.0	58.0	55.6	59.0		40.0	38.0	36.1	35.0	38.3	32.8	25.0	24.9	22.7	17.4	15.8
4.0			65.2	69.8		48.0	44.0	43.2	42.0	44.7	38.1	31.0	29.4	26.8	20.8	18.4
5.0			73.9	79.7		55.0	50.0	49.9	48.0	50.4	42.8	35.0	33.6	30.6	23.9	20.7
6.0			82.0	89.0		62.0	55.0	56.2	54.0	55.6	47.2	40.0	37.5	34.2	26.9	22.8
7.0			89.5	97.8		69.0	60.0	62.2	60.0	60.6	51.2	45.0	41.2	37.6	29.7	24.8
8.0			96.6	106.2		74.0	66.0	68.0	66.0	65.2	54.9	48.0	44.7	40.8	32.4	26.6
9.0			103.4			80.0	72.0			69.6	58.5	52.0	48.0	43.9	35.1	28.3
10.0			110.0			84.0	78.0			73.8	61.9	56.0	51.3	46.9	37.7	30.0
11.0			116.3			87.0	83.0			77.8	65.2	60.0	54.5	49.8	40.2	31.6
12.0			122.4			90.0	88.0			81.8	68.3		57.6	52.6	42.7	33.1
13.0										85.5	71.3		60.6	55.4	45.1	34.6
14.0										89.2	74.2		63.5	58.1		36.0
15.0										92.8	77.1		66.4	60.8		37.4
16.0										96.3	79.8		69.3	63.4		38.7
17.0										99.7	82.5		72.1	65.9		40.0
18.0										103.0	85.1		74.8	68.4		41.3
19.0										106.3				70.9		
20.0										109.5				73.4		
21.0										112.6				75.8		
22.0										115.7				78.2		
23.0										118.7				80.6		
25.0										124.7				85.3		
26.0										127.6				87.5		
26.5										129.0				88.7		

Loss Calculation: Loss at any Frequency equals square root of Frequency (GHz) times the first row number plus Frequency (GHz) times the second row number.

Square Root Freq.	From	28.900	28.461	From	15.752	From	20.589	18.147	From	11.000	From	8.724
"Plus" Freq.	Mil-Spec	1.860	3.2180	Mil-Spec	2.9291	Mil-Spec	0.8692	0.4522	Mil-Spec	1.2100	Manuf.	0.2390

21.412	20.011	19.860	16.746	11.719	11.297	10.716	9.445
1.4343	0.9908	1.0207	0.1046	1.2915	0.9915	1.0033	0.1581

**FOR ADDITIONAL CATALOGS
CALL "THE CATALOG REQUEST LINE"
1-800-362-3539**

**CALL 1-800-362-FLEX
FOR ADDITIONAL INFORMATION**

**CHECK OUT TENSOLITE'S WEB SITE:
www.tensolite.com**

EMAIL US AT rfmicrowave@tensolite.com

FAX: 360-759-4016

75 Ohm Product Guide



General Purpose Mi-
crowave Assemblies

Tensolite RF/Microwave Interconnects 1-800-362-FLEX

A **CARLISLE** Company

Website: www.tensolite.com

TENSOLITE CABLE ASSEMBLY TECHNICAL DATA

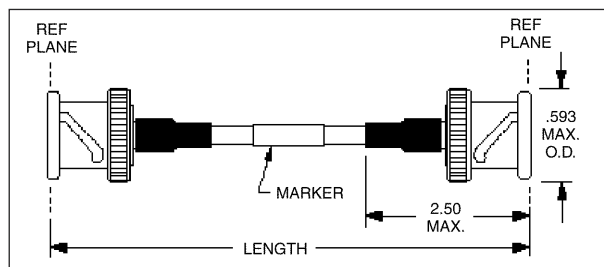
75 OHM BNC MALE TO BNC MALE ON 521 CABLE

ELECTRICAL SPECIFICATIONS

IMPEDANCE, NOMINAL:	75	OHMS			
CAPACITANCE NOMINAL:	20.2	pf/FOOT			
RELATIVE SHIELDING (CONNECTOR LIMITED):	> -55	db MIN.			
VELOCITY OF PROPAGATION NOMINAL:	0.67	%			
INSULATION RESISTANCE:	1000	MEGOHMS MIN.			
DIELECTRIC WITHSTANDING VOLTAGE:	1000	VRMS MIN.			
ELECTRICAL DELAY:	1.52	ns /FOOT			
ELECTRICAL DELAY:	126	ps /INCH			
MAX. P ₀ LSE RF POWER:	500	WATTS			
(INTO A 50 OHM S _v STEM, WITH D ₀ T _v C _v CLE LESS THAN CW RATING)					
F (IN GHz) →	0.5	1	2	2	
MAX. CW WATTS →	75	50	32	25	

MECHANICAL SPECIFICATIONS:

CABLE MAX. DIAMETER:	0.217	INCHES
MIN. BEND RADIUS S:	1.09	INCHES
PREFERRED BEND RADIUS S:	4.34	INCHES
CONNECTOR RETENTION:	60	PO ₀ NDS MIN.
TEMPERATURE RANGE:	-40 / + 85	DEGREES C
MATING TORQUE:	N/A	INCH PO ₀ NDS
CONNECTOR INTERFACE:	MIL-STD-348	



MATERIALS AND FINISHES

DESCRIPTION	MATERIAL	FINISH OR COLOR
CABLE JACK ET:	POLYURETHANE	GRAY TINT
MAR. ER:	VINYL	WHITE/CLEAR LAMINATE
BOOTS:	MIL-I-23053	BLACK
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
BNC BODY:	ASTM B16 BRASS	QQ-N-290 NIC EL PLATED
BNC NUT:	ASTM B16 BRASS	QQ-N-290 NIC EL PLATED
BNC CONTACT:	ASTM B196 BeCu	MIL-G-45204 GOLD PLATED
INSULATORS:	ASTM D1457 PTFE	NONE
BNC GAS ET	ZZ-R-765 SILICON RUBBER	RED
SOLVENTS:	NO OZONE DEPLETING MATERIALS ARE USED	

PART NUMBER	LENGTH INCHES	LENGTH	WEIGHT OUNCES	MAXIMUM M VSWR :1 AT FREQ. (IN GHz.)				MAXIMUM M INSERTION LOSS IN dB AT FREQ. (IN GHz.)				LENGTH CM
				0.5	.5 TO 1	1 TO 2	2 TO 3	0.5	.5 TO 1	1 TO 2	2 TO 3	
1-C4C4-521- 3206	S 6.0	0.25	0.7	1.20	1.23	1.25	1.33	0.23	0.31	0.43	0.52	2.36
1-C4C4-521- 3207	7.0	0.25	0.8	1.20	1.23	1.25	1.33	0.24	0.32	0.45	0.55	2.76
1-C4C4-521- 3208	8.0	0.25	0.8	1.20	1.23	1.25	1.33	0.25	0.34	0.47	0.58	3.15
1-C4C4-521- 3209	S 9.0	0.25	0.9	1.20	1.23	1.25	1.33	0.26	0.35	0.49	0.61	3.54
1-C4C4-521- 3210	10.0	0.25	0.9	1.20	1.23	1.25	1.33	0.27	0.37	0.52	0.64	3.94
1-C4C4-521- 3211	11.0	0.25	1.0	1.20	1.23	1.25	1.33	0.28	0.38	0.54	0.67	4.33
1-C4C4-521- 3212	S 12.0	0.25	1.0	1.20	1.23	1.25	1.33	0.29	0.40	0.56	0.70	4.72
1-C4C4-521- 3213	13.0	0.25	1.1	1.20	1.23	1.25	1.33	0.30	0.41	0.58	0.72	5.12
1-C4C4-521- 3214	14.0	0.25	1.1	1.20	1.23	1.25	1.33	0.31	0.43	0.61	0.75	5.51
1-C4C4-521- 3215	15.0	0.25	1.2	1.20	1.23	1.25	1.33	0.32	0.44	0.63	0.78	5.91
1-C4C4-521- 3216	16.0	0.25	1.3	1.20	1.23	1.25	1.33	0.33	0.46	0.65	0.81	6.30
1-C4C4-521- 3217	17.0	0.25	1.3	1.20	1.23	1.25	1.33	0.34	0.47	0.67	0.84	6.69
1-C4C4-521- 3218	S 18.0	0.25	1.4	1.20	1.23	1.25	1.33	0.35	0.49	0.70	0.87	7.09
1-C4C4-521- 3219	19.0	0.25	1.4	1.20	1.23	1.25	1.33	0.36	0.50	0.72	0.90	7.48
1-C4C4-521- 3220	20.0	0.25	1.5	1.20	1.23	1.25	1.33	0.37	0.52	0.74	0.93	7.87
1-C4C4-521- 3221	21.0	0.25	1.5	1.20	1.23	1.25	1.33	0.38	0.53	0.76	0.96	8.27
1-C4C4-521- 3222	22.0	0.25	1.6	1.20	1.23	1.25	1.33	0.39	0.55	0.79	0.98	8.66
1-C4C4-521- 3223	23.0	0.25	1.6	1.20	1.23	1.25	1.33	0.40	0.56	0.81	1.01	9.06
1-C4C4-521- 3224	S 24.0	0.25	1.7	1.20	1.23	1.25	1.33	0.41	0.58	0.83	1.04	9.45
1-C4C4-521- 3226	26.0	0.25	1.8	1.20	1.23	1.25	1.33	0.43	0.61	0.88	1.10	10.24
1-C4C4-521- 3228	28.0	0.28	1.9	1.20	1.23	1.25	1.33	0.45	0.64	0.92	1.16	11.02
1-C4C4-521- 3230	30.0	0.30	2.0	1.20	1.23	1.25	1.33	0.47	0.67	0.97	1.21	11.81
1-C4C4-521- 3232	32.0	0.32	2.1	1.20	1.23	1.25	1.33	0.49	0.70	1.01	1.27	12.60
1-C4C4-521- 3234	34.0	0.34	2.2	1.20	1.23	1.25	1.33	0.51	0.73	1.06	1.33	13.39
1-C4C4-521- 3236	S 36.0	0.36	2.3	1.20	1.23	1.25	1.33	0.53	0.76	1.10	1.39	14.17
1-C4C4-521- 3239	39.0	0.39	2.4	1.20	1.23	1.25	1.33	0.56	0.80	1.17	1.47	15.35
1-C4C4-521- 3242	42.0	0.42	2.6	1.20	1.23	1.25	1.33	0.59	0.85	1.24	1.56	16.54
1-C4C4-521- 3245	45.0	0.45	2.8	1.20	1.23	1.25	1.33	0.62	0.89	1.30	1.65	17.72
1-C4C4-521- 3248	S 48.0	0.48	2.9	1.20	1.23	1.25	1.33	0.65	0.93	1.37	1.73	18.90
1-C4C4-521- 3254	54.0	0.54	3.2	1.20	1.23	1.25	1.33	0.71	1.02	1.51	1.91	21.26
1-C4C4-521- 3260	S 60.0	0.60	3.5	1.20	1.23	1.25	1.33	0.77	1.11	1.64	2.08	23.62
1-C4C4-521- 3266	66.0	0.66	3.9	1.13	1.17	1.21	1.23	0.83	1.20	1.77	2.25	25.98
1-C4C4-521- 3272	S 72.0	0.72	4.2	1.13	1.17	1.21	1.23	0.89	1.29	1.91	2.43	28.35
1-C4C4-521- 3284	84.0	0.84	4.8	1.13	1.17	1.21	1.23	1.01	1.47	2.18	2.77	33.07
1-C4C4-521- 3296	96.0	0.96	5.4	1.20	1.23	1.25	1.33	1.13	1.65	2.45	3.12	37.80
1-C4C4-521- 3299	99.0	0.99	5.6	1.13	1.17	1.21	1.23	1.16	1.69	2.52	3.20	38.98
2-C4C4-521- 3209	108.0	1.08	6.0	1.13	1.17	1.21	1.23	1.25	1.83	2.72	3.46	42.52
2-C4C4-521- 3210	120.0	1.20	6.7	1.13	1.17	1.21	1.23	1.37	2.01	2.99	3.81	47.24
2-C4C4-521- 3212	144.0	1.44	7.9	1.15	1.20	1.23	1.25	1.61	2.36	3.53	4.50	56.69

NOTE: PROD₀ CT SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE H₀ MIDIT_v.
 PROD₀ CT SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE H₀ MIDIT_v, COND₀ LT FACTOR_v FOR PROD₀ CT CHARACTERISTICS AT OTHER CONDITIONS

General Purpose Microwave Assemblies

TENSOLITE CABLE ASSEMBLY TECHNICAL DATA

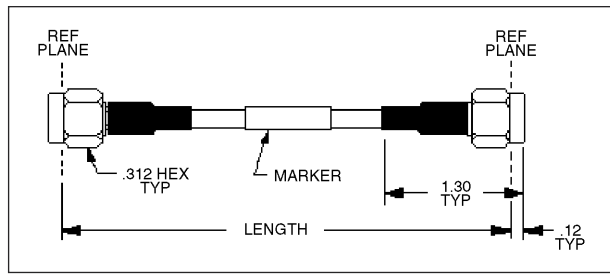
75 OHM Q75SMA MALE TO MALE ON 521 CABLE

ELECTRICAL SPECIFICATIONS

IMPEDANCE, NOMINAL:	75	OHMS				
CAPACITANCE NOMINAL:	20.2	pf/FOOT				
RELATIVE SHIELDING:	> -90	db MIN.				
VELOCITY OF PROPAGATION NOMINAL:	0.67	%				
INSULATION RESISTANCE:	1000	MEGOHMS MIN.				
DIELECTRIC WITHSTANDING VOLTAGE:	1000	VRMS MIN.				
ELECTRICAL DELAY:	1.52	ns /FOOT				
ELECTRICAL DELAY:	126	ps /INCH				
MAX. P _{AVE} LSE RF POWER:	500	WATTS				
(INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)						
F (IN GHz) →	0.5	1	2	3		
MAX. CW WATTS →	75	50	32	25		

MECHANICAL SPECIFICATIONS:

CABLE MAX. DIAMETER:	0.217	INCHES
MIN. BEND RADIUS:	1.09	INCHES
PREFERRED BEND RADIUS:	4.34	INCHES
CONNECTOR RETENTION:	60	POUNDS MIN.
TEMPERATURE RANGE:	-40 / + 85	DEGREES C
MATING TORQUE:	7-10	INCH POUNDS
CONNECTOR INTERFACE	QMI-STD-348	Q75SMA



MATERIALS AND FINISHES

DESCRIPTION	MATERIAL	FINISH OR COLOR
CABLE JACKET:	POLYURETHANE	GRAY TINT
MAR. ER:	VINYL	WHITE/CLEAR LAMINATE
BOOTS:	MIL-I-23053	BLACK
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
SMA BODY:	ASTM A 582 303 STAINLESS STEEL	QQ-9-35 PASSIVATED
SMA NUT:	ASTM A 582 303 STAINLESS STEEL	QQ-9-35 PASSIVATED
SMA CONTACT:	ASTM B196 BeCu	MIL-G-45204 GOLD PLATED
INSULATORS:	ASTM D1457 PTFE	NONE
SMA GAS ET	ZZ-R-765 SILICON RUBBER	RED
SOLVENTS:	NO OZONE DEPLETING MATERIALS ARE USED	
NOTE: Q75SMA'S WILL NOT MATE WITH 50 OHM SMA'S		

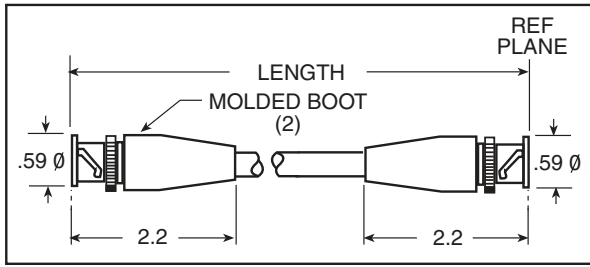
PART NUMBER	MOUNTING	LENGTH INCHES	CABLE LENGTH	WEIGHT OUNCES	MAXIMUM RETURN LOSS (dB) AT FREQUENCY (IN GHz)				MAXIMUM INSERTION LOSS IN dB AT FREQUENCY (IN GHz)				LENGTH CM
					0.5 TO 1	1 TO 2	2 TO 3	3 TO 4	0.5 TO 1	1 TO 2	2 TO 3	3 TO 4	
1-E6E6-521-3206	S	6.0	0.25	0.5	1.10	1.12	1.15	1.20	0.15	0.20	0.27	0.33	2.36
1-E6E6-521-3207		7.0	0.25	0.6	1.10	1.12	1.15	1.20	0.16	0.21	0.29	0.36	2.76
1-E6E6-521-3208		8.0	0.25	0.6	1.10	1.12	1.15	1.20	0.17	0.23	0.32	0.39	3.15
1-E6E6-521-3209	S	9.0	0.25	0.7	1.10	1.12	1.15	1.20	0.18	0.24	0.34	0.42	3.54
1-E6E6-521-3210		10.0	0.25	0.7	1.10	1.12	1.15	1.20	0.19	0.26	0.36	0.45	3.94
1-E6E6-521-3211		11.0	0.25	0.8	1.10	1.12	1.15	1.20	0.20	0.27	0.38	0.48	4.33
1-E6E6-521-3212	S	12.0	0.25	0.8	1.10	1.12	1.15	1.20	0.21	0.29	0.41	0.51	4.72
1-E6E6-521-3213		13.0	0.25	0.9	1.10	1.12	1.15	1.20	0.22	0.30	0.43	0.53	5.12
1-E6E6-521-3214		14.0	0.25	1.0	1.10	1.12	1.15	1.20	0.23	0.32	0.45	0.56	5.51
1-E6E6-521-3215		15.0	0.25	1.0	1.10	1.12	1.15	1.20	0.24	0.33	0.47	0.59	5.91
1-E6E6-521-3216		16.0	0.25	1.1	1.10	1.12	1.15	1.20	0.25	0.35	0.50	0.62	6.30
1-E6E6-521-3217		17.0	0.25	1.1	1.10	1.12	1.15	1.20	0.26	0.36	0.52	0.65	6.69
1-E6E6-521-3218	S	18.0	0.25	1.2	1.10	1.12	1.15	1.20	0.27	0.38	0.54	0.68	7.09
1-E6E6-521-3219		19.0	0.25	1.2	1.10	1.12	1.15	1.20	0.28	0.39	0.56	0.71	7.48
1-E6E6-521-3220		20.0	0.25	1.3	1.10	1.12	1.15	1.20	0.29	0.41	0.59	0.74	7.87
1-E6E6-521-3221		21.0	0.25	1.3	1.10	1.12	1.15	1.20	0.30	0.42	0.61	0.76	8.27
1-E6E6-521-3222		22.0	0.25	1.4	1.10	1.12	1.15	1.20	0.31	0.44	0.63	0.79	8.66
1-E6E6-521-3223		23.0	0.25	1.4	1.10	1.12	1.15	1.20	0.32	0.45	0.65	0.82	9.06
1-E6E6-521-3224	S	24.0	0.25	1.5	1.10	1.12	1.15	1.20	0.33	0.47	0.68	0.85	9.45
1-E6E6-521-3226		26.0	0.25	1.6	1.10	1.12	1.15	1.20	0.35	0.50	0.72	0.91	10.24
1-E6E6-521-3228		28.0	0.28	1.7	1.10	1.12	1.15	1.20	0.37	0.53	0.77	0.97	11.02
1-E6E6-521-3230		30.0	0.30	1.8	1.10	1.12	1.15	1.20	0.39	0.56	0.81	1.02	11.81
1-E6E6-521-3232		32.0	0.32	1.9	1.10	1.12	1.15	1.20	0.41	0.59	0.86	1.08	12.60
1-E6E6-521-3234		34.0	0.34	2.0	1.10	1.12	1.15	1.20	0.43	0.62	0.90	1.14	13.39
1-E6E6-521-3236	S	36.0	0.36	2.1	1.10	1.12	1.15	1.20	0.45	0.65	0.95	1.20	14.17
1-E6E6-521-3239		39.0	0.39	2.2	1.10	1.12	1.15	1.20	0.48	0.69	1.01	1.28	15.35
1-E6E6-521-3242		42.0	0.42	2.3	1.10	1.12	1.15	1.20	0.51	0.74	1.08	1.37	16.54
1-E6E6-521-3245		45.0	0.45	2.6	1.10	1.12	1.15	1.20	0.54	0.78	1.15	1.46	17.72
1-E6E6-521-3248	S	48.0	0.48	2.7	1.10	1.12	1.15	1.20	0.57	0.82	1.21	1.54	18.90
1-E6E6-521-3254		54.0	0.54	3.0	1.10	1.12	1.15	1.20	0.63	0.91	1.35	1.72	21.26
1-E6E6-521-3260	S	60.0	0.60	3.3	1.10	1.12	1.15	1.20	0.69	1.00	1.48	1.89	23.62
1-E6E6-521-3266		66.0	0.66	3.7	1.13	1.17	1.21	1.23	0.75	1.09	1.62	2.06	25.98
1-E6E6-521-3272	S	72.0	0.72	4.0	1.13	1.17	1.21	1.23	0.81	1.18	1.75	2.24	28.35
1-E6E6-521-3284		84.0	0.84	4.6	1.13	1.17	1.21	1.23	0.93	1.36	2.02	2.58	33.07
1-E6E6-521-3296		96.0	0.96	5.2	1.13	1.17	1.21	1.23	1.05	1.54	2.29	2.93	37.80
1-E6E6-521-3299		99.0	0.99	5.4	1.13	1.17	1.21	1.23	1.08	1.58	2.36	3.01	38.98
2-E6E6-521-3209		108.0	1.08	6.8	1.13	1.17	1.21	1.23	1.17	1.72	2.56	3.27	42.52
2-E6E6-521-3210		120.0	1.20	6.5	1.13	1.17	1.21	1.23	1.29	1.90	2.83	3.62	47.24
2-E6E6-521-3212		144.0	1.44	7.7	1.13	1.17	1.21	1.23	1.53	2.25	3.37	4.31	56.69
2-E6E6-521-3215		180.0	1.80	9.6	1.13	1.17	1.21	1.23	1.89	2.79	4.18	5.35	70.87
2-E6E6-521-3220		240.0	2.40	12.7	1.13	1.17	1.21	1.23	2.50	3.68	5.53	7.08	94.49

S - STANDARD ITEM MAXIMUM RETURN LOSS SPECIFICATIONS ARE PRODUCTION MAXIMUM MEASUREMENT RING STEM UNCERTAINTY.

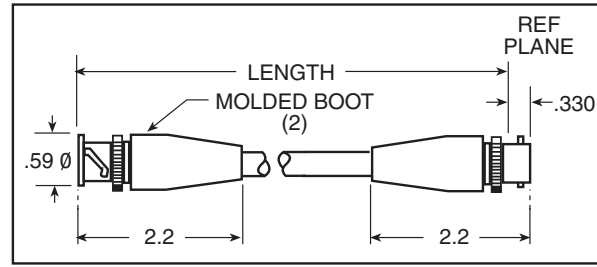
NOTE: PRODUCTION SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY. PRODUCTION SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CONDUCTION FACTOR FOR PRODUCTION CHARACTERISTICS AT OTHER CONDITIONS

TENSOLITE CABLE ASSEMBLY TECHNICAL DATA

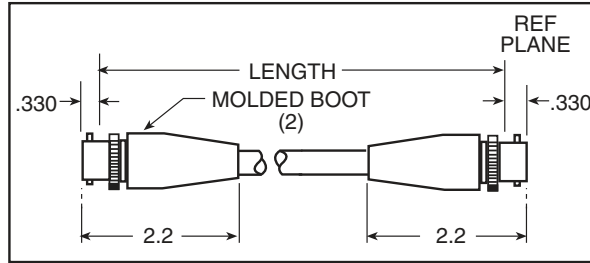
TS75 75OHM Q75BNC CABLE ASSEMBLY



TS75E6E6 CONFIGURATION



TS75E6E8 CONFIGURATION



TS75E8E8 CONFIGURATION

ELECTRICAL SPECIFICATIONS

IMPEDANCE, NOMINAL:	75	OHMS
CAPACITANCE NOMINAL:	20.2	pf/FOOT
VELOCITY OF PROPAGATION NOMINAL:	67.0	%
RELATIVE SHIELDING PARALLEL TO, CHING 24 IN:	-100.0	db MIN.
INSULATION RESISTANCE:	1000	MEGOHMS MIN.
DIELECTRIC WITHSTANDING VOLTAGE:	1500	VRMS MIN.
ELECTRICAL DELAY, NOMINAL:	1.52	ns/FOOT
ELECTRICAL DELAY, NOMINAL:	127	ps/INCH
POWER LOSS:	800	WATTS MAX.

(INTO A 75 OHM SYSTEM, WITH DELAY, COEFFICIENT LESS THAN CW RATING)

F (IN GHZ) →	1	2	3
MAX. CW WATTS →	50	35	25
PHASE STABILITY DEG.	0.9	1.8	3.6
LOSS STABILITY db →	0.03	0.06	0.09

CABLE FORMED AND STRAIGHTENED 90 DEGREES ON A 4" RADIUS
 Cables are manufactured as matched sets or matched to laboratory standards.
 Cables maintain network analyzer compatible characteristics during product life when formed up to 180 degrees at a 4 inch or greater radius.

MECHANICAL SPECIFICATIONS:

CABLE MAX. DIAMETER:	0.240	INCHES
MIN. ONE TIME BEND RADIUS:	1.50	INCHES
FLEXED BEND RADIUS:	4.00	INCHES
CONNECTOR RETENTION:	60	POUNDS NDS MIN.
TEMPERATURE RANGE:	-13 / + 33	DEGREES C
MATING TORQUE:	7-10	INCH POUNDS
CONNECTOR INTERFACE	75 OHM BNC	Q75BNC

MATERIALS AND FINISHES

DESCRIPTION	MATERIAL	FINISH OR COLOR
CABLE JACKET:	PVC	BLACK
MARKING:	N/A	WHITE
BOOTS:	REBBER COMPOUND	BLACK
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
CONTACTS:	ASTM B196 BeCu	MIL-G-45204 GOLD PLATED
INSULATORS:	ASTM D1457 PTFE	NONE
CONNECTOR BODY:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
CONTACTS:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
AVAILABLE GAS:	ZZ-R-765 SILICON REBBER	RED

THE TRIPERIN MALE CONNECTOR DOES NOT HAVE A WEATHER SEALING GAS. ET. AVAILABLE WHEN INSTALLED. TRIPERIN GAS IS AVAILABLE.
 ORDER GAS, ET, PART NUMBER: 5-1368-100-17.
 SOLVENTS: NO OZONE DEPLETING MATERIALS ARE USED

NOTE: THESE CABLE ASSEMBLIES WILL NOT MATE WITH 50 OHM SMA CONNECTORS

AVAILABLE CONFIGURATIONS:

CONN. 1	CONN. 2	LENGTH	QMI PART NUMBER
MALE	MALE	24	TS75C4C4-61
MALE	MALE	34	TS75C4C4-86
MALE	FEMALE	24	TS75C4C4-61
MALE	FEMALE	34	TS75C4C4-86
FEMALE	FEMALE	24	TS75C4C4-61
FEMALE	FEMALE	34	TS75C4C4-86

PART NUMBER	Q75SMA CONN.	LENGTH INCHES	MAX. WEIGHT OUNCES	MAXIMUM VSWR :1 AT FREQ. (IN GHZ.)					MAXIMUM INSERTION LOSS IN DB AT FREQ. (IN GHZ.)					LENGTH CM	
				1 TO 1	1 TO 2	2 TO 3	3 TO 4	4 TO 6	1 TO 1	1 TO 2	2 TO 3	3 TO 6			
TS75C4C4-61	M-M	24	1.20	5.3	1.15	1.20	1.25				0.55	0.80	1.01	1.49	61
TS75C4C4-86	M-M	34	1.70	5.8	1.15	1.20	1.25				0.70	1.03	1.30	1.94	86
TS75C4C6-61	M-F	24	1.20	5.3	1.15	1.20	1.25				0.55	0.80	1.01	1.49	61
TS75C4C6-86	M-F	34	1.70	5.8	1.15	1.20	1.25				0.70	1.03	1.30	1.94	86
TS75C6C6-61	F-F	24	1.20	5.3	1.15	1.20	1.25				0.55	0.80	1.01	1.49	61
TS75C6C6-86	F-F	34	1.70	5.8	1.15	1.20	1.25				0.70	1.03	1.30	1.94	86

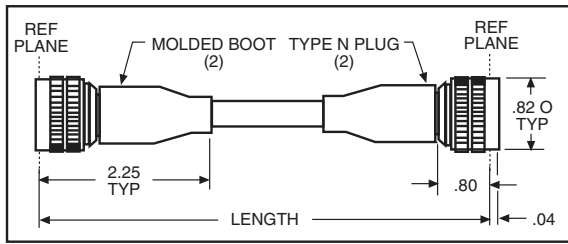
MAXIMUM SPECIFICATIONS ARE PRODUCTION INCLUDING MEASURING SYSTEM UNCERTAINTY.

ALSO AVAILABLE: TS1818-STRA SET OF 4 7.5 INCH 50 OHM CABLES USED TO INTERCONNECT NETWORK ANALYZERS TO TEST SETS.
 AS: FOR DATA SHEET TS

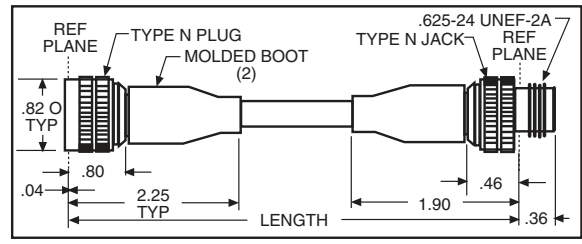
NOTE: PRODUCTION SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.

PRODUCTION SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CORRECTION FACTOR FOR PRODUCTION CHARACTERISTICS AT OTHER CONDITIONS.

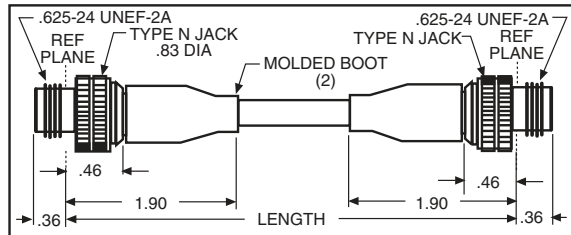
General Purpose Military Assemblies



TS751818 CONFIGURATION



TS751820 CONFIGURATION



TS752020 CONFIGURATION

ELECTRICAL SPECIFICATIONS

IMPEDANCE, NOMINAL:	75 OHMS
CAPACITANCE NOMINAL:	20.2 pf/FOOT
VELOCITY OF PROPAGATION NOMINAL:	67.0 %
RELATIVE SHIELDING PARALLEL TO CHING 24 IN:	-100.0 db MIN.
INSULATION RESISTANCE:	1000 MEGOHMS MIN.
DIELECTRIC WITHSTANDING VOLTAGE:	1500 VRMS MIN.
ELECTRICAL DELAY, NOMINAL:	1.52 ns/FOOT
ELECTRICAL DELAY, NOMINAL:	127 ps/INCH
PULSE RF POWER:	800 WATTS MAX.

(INTO A 75 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)

F (IN GHz) →	1	2	3
MAX. CW WATTS →	50	35	25
PHASE STABILITY, DEG.	0.3	0.6	1.2
LOSS STABILITY, db →	0.01	0.02	0.03

CABLE FORMED AND STRAIGHTENED 90 DEGREES ON A 4" RADIUS. Cables are manufactured as matched sets or matched to laboratory standards. Cables maintain network analyzer compatible characteristics during product life when formed up to 180 degrees at a 4 inch or greater radius.

MECHANICAL SPECIFICATIONS:

CABLE MAX. DIAMETER:	0.240 INCHES
MIN. ONE TIME BEND RADIUS:	1.50 INCHES
FLEXED BEND RADIUS:	4.00 INCHES
CONNECTOR RETENTION:	60 POUNDS NDS MIN.
TEMPERATURE RANGE:	-13 / +33 DEGREES C
MATING TORQUE:	7-10 INCH POUNDS NDS
CONNECTOR INTERFACE	hp 75 OHM TYPE N

MATERIALS AND FINISHES

DESCRIPTION	MATERIAL	FINISH OR COLOR
CABLE JACK ET:	PVC	BLACK
MARKING:	-	WHITE
BOOTS:	REINFORCED COMPOUND	BLACK
SOLDER:	QQ-S-671	NONE
FLUX:	MIL-F-14256, RMA	NONE
CONTACTS:	ASTM B196 BeCu	MIL-G-45204 GOLD PLATED
INSULATORS:	ASTM D1457 PTFE	NONE
N CONNECTOR BODY:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
NUTS:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
AVAILABLE GAS ET:	ZZ-R-765 SILICON REINFORCED	RED

THE TYPE N MALE CONNECTOR DOES NOT HAVE A WEATHER SEALING GAS. ET IS AVAILABLE.
 ORDER GAS ET, PART NUMBER 5-1368-100-17.
 SOLVENTS NO OZONE DEPLETING MATERIALS ARE USED

AVAILABLE CONFIGURATIONS:

CONN. 1	CONN. 2	LENGTH	QMI PART NUMBER	COMMENT
N MALE	N MALE	24	TS751818-61	hp PART NUMBER 8120-2408
N MALE	N MALE	34	TS751818-86	34 INCH VERSION OF ABOVE
N MALE	N FEMALE	24	TS751820-61	hp PART NUMBER 8120-2409
N MALE	N FEMALE	34	TS751820-86	34 INCH VERSION OF ABOVE
N FEMALE	N FEMALE	24	TS75020-61	24 INCH FEMALE-FEMALE SPECIAL
N FEMALE	N FEMALE	34	TS752020-86	34 INCH FEMALE-FEMALE SPECIAL

PART NUMBER	Q75SMA CONN.	LENGTH INCHES	LENGTH INCHES	MAX. WEIGHT OUNCES	MAXIMUM VSWR :1 AT FREQ. (IN GHz.)						MAXIMUM INSERTION LOSS IN dB AT FREQ. (IN GHz.)						LENGTH CM
					1 TO 1	1 TO 2	2 TO 3	3 TO 3	3 TO 6	3 TO 6	3 TO 6	3 TO 6					
TS751818-61	M-M	24	1.20	5.3	1.07	1.10	1.20			0.45	0.66	0.84	1.24			61	
TS751818-86	M-M	34	1.70	5.8	1.07	1.10	1.20			0.60	0.88	1.13	1.69			86	
TS751820-61	M-F	24	1.20	5.3	1.07	1.10	1.20			0.45	0.66	0.84	1.24			61	
TS751820-86	M-F	34	1.70	5.8	1.07	1.10	1.20			0.60	0.88	1.13	1.69			86	
TS751820-61S	M-F	2 24 INCH CABLES: 1 N MALE, 1 N MALE N FEMALE															
TS752020-61	F-F	24	1.20	5.3	1.07	1.10	1.20			0.45	0.66	0.84	1.24			61	
TS752020-86	F-F	34	1.70	5.8	1.07	1.10	1.20			0.60	0.88	1.13	1.69			86	

MAXIMUM SPECIFICATIONS ARE PRODUCTION MAXIMUM INCLUDING MEASUREMENT UNCERTAINTY.

hp PART NUMBER	CONN	LENGTH	ORDER QMI NUMBER
11857 B	SET	24	TS751820-(61S)(SET1818, 1820)

THE FOLLOWING IS A PARTIAL LIST OF THE hp TEST EQUIPMENT THAT UTILIZES THESE CABLE ASSEMBLIES

3577 ANA	8713 ANA	85046 S PAR
4195 ANA	8714 ANA	87511 S PAR
4396 ANA	8751 ANA	
8503 S PAR	8752 ANA	
8505 ANA	8753 ANA	
8507 ANA	11850 PS	
8711 ANA	35677 S PAR	
8712 ANA	41952 T/R	

ANA - AUTOMATIC NETWORK ANALYZER
 S PAR - S PARAMETER TEST SET
 T/R - TRANSMISSION REFLECTION TEST SET
 PS - POWER SPLITTER

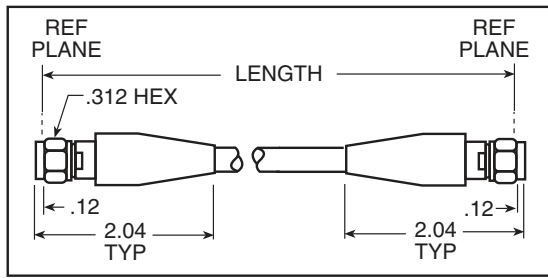
ALSO AVAILABLE: TS1818-STRASET OF 4 7.5 INCH 50 OHM CABLES USED TO INTERCONNECT NETWORK ANALYZERS TO TEST SETS.

SEE DATA SHEET TS

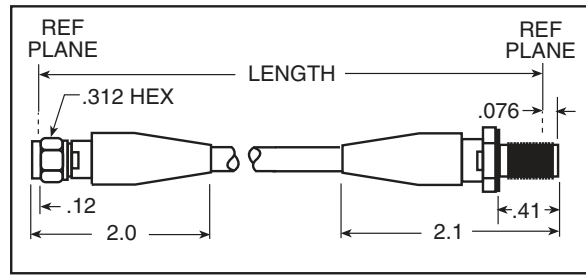
NOTE: hp 11857 A AND 11857D ARE 50 OHM 7MM ASSEMBLIES 11857B IS A SET OF 2 75 OHM TYPE N ASSEMBLIES

NOTE: PROD. CT SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.

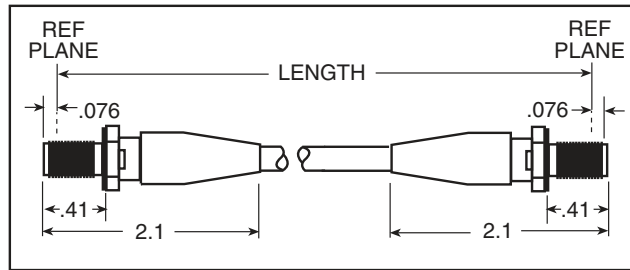
PROD. CT SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, COSINE SQUARED FACTOR. FOR PROD. CT CHARACTERISTICS AT OTHER CONDITIONS.



TS75E6E6 CONFIGURATION



TS75E6E8 CONFIGURATION



ELECTRICAL SPECIFICATIONS

IMPEDANCE, NOMINAL:	75	OHMS
CAPACITANCE NOMINAL:	20.2	pf/FOOT
VELOCITY OF PROPAGATION NOMINAL:	67.0	%
RELATIVE SHIELDING PARALLEL TO PLANE CHANGING 24 IN:	-100.0	db MIN.
INSULATION RESISTANCE:	1000	MEG OHMS MIN.
DIELECTRIC WITHSTANDING VOLTAGE:	1500	VRMS MIN.
ELECTRICAL DELAY, NOMINAL:	1.52	ns/FOOT
ELECTRICAL DELAY, NOMINAL:	127	ps/INCH
POWER LOSS AT 75 OHM S, TEMPERATURE WITH DUTY CYCLE LESS THAN CW RATING:	800	WATTS MAX.

F (IN GHz) →	1	2	3
MAX. CW WATTS →	50	35	25
PHASE STABILITY DEG.	0.3	0.6	1.2
LOSS STABILITY db →	0.01	0.02	0.03

CABLE FORMED AND STRAIGHTENED 90 DEGREES ON A 4" RADIUS
 Cables are manufactured as matched sets or matched to laboratory standards.
 Cables maintain network analyzer compatible characteristics during product life when formed up to 180 degrees at a 4 inch or greater radius.

MECHANICAL SPECIFICATIONS:

CABLE MAX. DIAMETER:	0.240	INCHES
MIN. ONE TIME BEND RADIUS:	1.50	INCHES
FLEXED BEND RADIUS:	4.00	INCHES
CONNECTOR RETENTION:	60	POUNDS MIN.
TEMPERATURE RANGE:	-13 / 33	DEGREES C
MATING TORQUE:	7-10	INCH POUNDS
CONNECTOR INTERFACE	HYBRID Q75SMA	

MATERIALS AND FINISHES

DESCRIPTION	MATERIAL	FINISH OR COLOR
CABLE JACKET:	PVC	BLACK
MARLING:	-	WHITE
BOOTS:	RUBBER COMPOUND	BLACK
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
CONTACTS:	ASTM B196 BeCu	MIL-G-45204 GOLD PLATED
INSULATORS:	ASTM D1457 PTFE	NONE
CONNECTOR BODY:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
NETS:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
AVAILABLE GAS:	ZZ-R-765 SILICON RUBBER	RED

THE TEMPERATURE MALE CONNECTOR DOES NOT HAVE A WEATHER SEALING GAS. EITHER MALE OR FEMALE GAS IS AVAILABLE.
 ORDER GAS, ET, PART NUMBER 5-1368-100-17.
 SOLVENTS NO OZONE DEPLETING MATERIALS ARE USED

NOTE: THESE CABLE ASSEMBLIES WILL NOT MATE WITH 50 OHM SMA CONNECTORS

AVAILABLE CONFIGURATIONS:

CONN. 1	CONN. 2	LENGTH	QMI PART NUMBER
MALE	MALE	24	TS75E6E6-61
MALE	MALE	34	TS75E6E6-86
MALE	FEMALE	24	TS75E6E8-61
MALE	FEMALE	34	TS75E6E8-86
FEMALE	FEMALE	24	TS75E8E8-61
FEMALE	FEMALE	34	TS75E8E8-86

PART NUMBER	Q75SMA CONN.	LENGTH INCHES	MAX. WEIGHT OUNCES	MAXIMUM VSWR :1 AT FREQ. ENVELOPE (IN GHz.)						MAXIMUM INSERTION LOSS IN dB AT FREQ. (IN GHz.)						LENGTH CM
				1 TO 1	1 TO 2	2 TO 3	3 TO 4	4 TO 5	5 TO 6	1 TO 1	1 TO 2	2 TO 3	3 TO 4	4 TO 5	5 TO 6	
TS75E6E6-61	M-M	24	1.20	5.3	1.07	1.10	1.20					0.45	0.66	0.84	1.24	61
TS75E6E6-86	M-M	34	1.70	5.8	1.07	1.10	1.20					0.60	0.88	1.13	1.69	86
TS75E6E8-61	M-F	24	1.20	5.3	1.07	1.10	1.20					0.45	0.66	0.84	1.24	61
TS75E6E8-86	M-F	34	1.70	5.8	1.07	1.10	1.20					0.60	0.88	1.13	1.69	86
TS75E8E8-61	F-F	24	1.20	5.3	1.07	1.10	1.20					0.45	0.66	0.84	1.24	61
TS75E8E8-86	F-F	34	1.70	5.8	1.07	1.10	1.20					0.60	0.88	1.13	1.69	86

MAXIMUM SPECIFICATIONS ARE PRODUCTION MAXIMUM INCLUDING MEASURING SYSTEM UNCERTAINTY.

ALSO AVAILABLE: TS1818-STRA SET OF 4 7.5 INCH 50 OHM CABLES USED TO INTERCONNECT NETWORK ANALYZERS TO TEST SETS.
 ASK FOR DATA SHEETS

NOTE: PRODUCTION SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.
 PRODUCTION SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, COSINE SQUARED FACTOR. FOR PRODUCTION CHARACTERISTICS AT OTHER CONDITIONS.

CABLE INSTALLATION INSTRUCTIONS FOR ANTI-TORQUE PLUGS

RECOMMENDED TOOLS AND ACCESSORIES:

- A. 1/4 inch flair nut wrench for anti-torque hex.
- B. 5/16 inch, 8 inch pound, break away torque wrench.
- C. SMACLEAN: TENSOLITE cleaning procedure for SMA interfaces.
(see reverse side)

PRE INSTALLATION CHECK:

The coupling nut should turn freely with respect to the connector anti-torque hex. Visually verify that the coupling nut threads and the mating face are free of foreign material, if necessary clean per Tensolite procedure "SMACLEAN".

INSTALLATION:

Grasp the coupling nut of the connector between the thumb and forefinger of one hand. Place the coupling nut of the anti-torque connector over the threads of the mating connector. Gently turn the coupling nut of the anti-torque plug using the thumb and forefinger (the cable should not rotate during this part of the installation process) until a slight increase in resistance to turning the nut is felt (usually 3 to 4 turns of the coupling nut). During installation where misalignment of the connectors occurs, the cable might have to be held to prevent rotation caused by torque generated due to the misalignment. The cable should be able to be held by hand, however in extreme cases when the cable cannot be prevented from rotating by hand, follow the procedure for "Torquing" for the entire installation.

TORQUING:

Place a 5/16, 7 to 9 inch pound torque wrench on the coupling nut of the connector. Place a 1/4 inch wrench on the anti-torque hex. Hold the 1/4 inch wrench steady (no rotation), if possible rest the wrench or the hand holding the wrench against a nearby object. Turn the coupling nut using the 5/16 torque wrench, until the torque wrench releases (usually 1/2 to 3/4 turn).

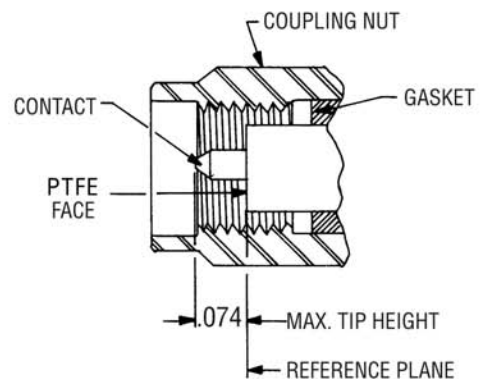
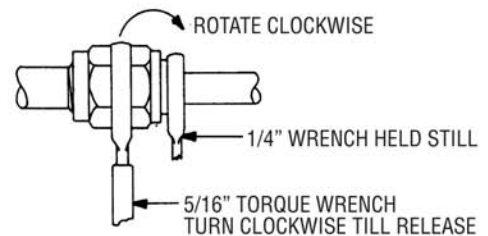
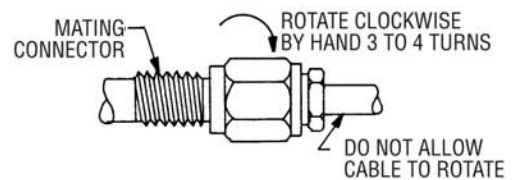
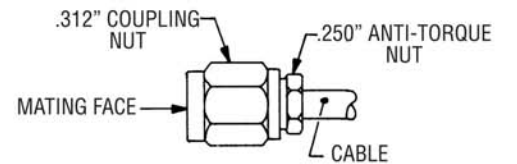
CHECK TIGHTNESS:

Remove the torque wrench and reset. Install the torque wrench on the coupling nut and apply force to the handle of the wrench until the torque wrench is close to releasing. Apply gentle force to the 1/4 inch wrench on the anti-torque hex, first counter clockwise then clockwise. The 1/4 inch wrench should not rotate. Remove both wrenches if the 1/4 inch wrench did not rotate.

PROCEDURE FOR UNITS WHICH FAIL

TIGHTNESS CHECK:

- Remove connector by reversing tightening and installation procedures
- Check that the coupling nut of the connector turns freely with respect to the connector body (anti-torque hex).
- Visually inspect that the coupling nut threads are properly formed and free of foreign material. The tip height of contact should be less than .074 (TENSOLITE anti-torque connectors only, for all others less than .100) above connector reference plane.
- Visually inspect the mating female connector. The threads should be properly formed and free of foreign material. The female socket contact should be unobstructed.



CLEANING PROCEDURE FOR SMA CONNECTOR INTERFACES

SCOPE: This procedure is to be utilized to remove foreign material from the mating face of SMA connectors.

REQUIRED EQUIPMENT:

- Lint free miniature swab (for both male and female)
- Lint free micro swab (for female only) **Note 1**
- Isopropyl alcohol per TT-I-735 **Note 3** solvent dispenser (Marshal Industries CM6-2)
- Compressed “air” canned (Marshal Industries C870) **Note 2**

RECOMMENDED EQUIPMENT: Visual aide (4X to 10X)

Note 1: The swabs above are recommended because they leave no residue and are inert to the recommended solvent. Cotton swabs are not recommended because they frequently leave strands of cotton on the connectors. Wood is not recommended due to the solvents “leaching” of resin and the possibility of leaving this residue on the connector.

Note 2: Canned air is recommended due to the presence of moisture and oils in air supplied by standard industrial compressors.

Note 3: The solvent should be checked for cleanliness by applying two drops of solvent to a glass microscope slide. The solvent should be allowed to dry. The slide should then be inspected for evidence of residue from the solvent. Only solvent which is free of residue should be used.

PROCEDURE FOR SMA MALE (PIN CONTACT) CONNECTORS

STEP 1: Point the mating face of the connector to be cleaned downward and direct a stream of compressed air at the mating face of the connector. This is to remove any loose foreign material on the connector.

STEP 2: Apply two drops of alcohol to a miniature cleaning swab. Place the swab on the face of the connector touching the gold plated center pin. Rotate the connector through 2 1/2 turns while gently wiping the mating face of the connector with the swab.

STEP 3: Point the mating face of the connector downward and direct a stream of compressed air at the mating face of the connector.

STEP 4: Visually inspect the mating face to verify that all foreign material has been removed. (The use of a 4X to 10X visual aide is recommended). Repeat Steps 1 to 4 if foreign material is still evident on the connector mating face.

PROCEDURE FOR SMA FEMALE (SOCKET CONTACT) CONNECTORS

STEP 1: Point the mating face of the connector to be cleaned downward and direct a stream of compressed air at the mating face of the connector. This is to remove any loose foreign material on the connector.

STEP 2: Visually inspect the female contact for foreign material. (The use of a 4X to 10X visual aide is recommended). Do not continue with this step if no foreign material is present. Direct a stream of alcohol at the female contact. Direct a stream of compressed air at the contact. Inspect to see if foreign material was removed. Do not continue with this step if the foreign material was removed. Moisten a micro swab with one drop of alcohol. Carefully insert the micro swab into the female contact socket. Rotate the connector through 2 1/2 turns. Remove the micro swab. Inspect to see if the foreign material was removed. If the foreign material was not removed repeat this step.

STEP 3: Apply two drops of alcohol to a miniature cleaning swab. Place the swab on the face of the connector touching the face of the shell adjacent to the insulator. Rotate the connector through 2 1/2 turns while gently wiping the mating face of the connector with the swab.

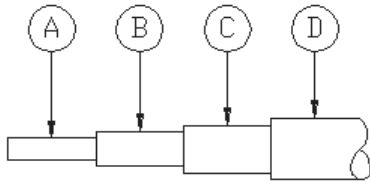
STEP 4: Point the mating face of the connector downward and direct a stream of compressed air at the mating face of the connector.

STEP 5: Visually inspect the mating face to verify that all foreign material has been removed. (The use of a 4X to 10X visual aide is recommended). Repeat Steps 2 to 5 if foreign material is still evident on the connector mating face.

PRODUCT FEATURE BULLETINS

FLEXIBLE CABLES

TENSOLITE CABLE DATA SHEET



CABLE CODE: 140
CATEGORY: FLEXIBLE
DESCRIPTION: RG-178
IMPEDANCE: 50 OHMS
MAX. OD: 0.075 INCHES
MAX. OPERATING FREQ.: 3 GHZ.
CUT OFF FREQ.: 109.3 GHZ.
CLAMP CABLE GROUP: 806
SOLDER CABLE GROUP: 978
CRIMP CABLE GROUP: 908
MIL SPEC: M17/93-RG178
FLORIDA PART X REF.: RG178

ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	STRANDED SILVER PLATED COPPER WIRE	0.012
B. DIELECTRIC:	SOLID PTFE	0.033
C. OUTER BRAID:	SILVER PLATED COPPER WIRE BRAID	0.049
D. JACKET:	SOLID FEP	0.072

MECHANICAL CHARACTERISTICS:

OUTER CONDUCTOR INTEGRITY: 15 POUNDS MINIMUM AXIAL PULL
MINIMUM BEND RADIUS (ONE TIME): 0.43 INCHES FIXED INSTALLATION
PREFERRED BEND RADIUS: 1.44 INCHES
TEMPERATURE RANGE: -55 / +200 DEGREES CELSIUS
WEIGHT MAXIMUM: 0.006 POUNDS PER FOOT

ELECTRICAL CHARACTERISTICS:

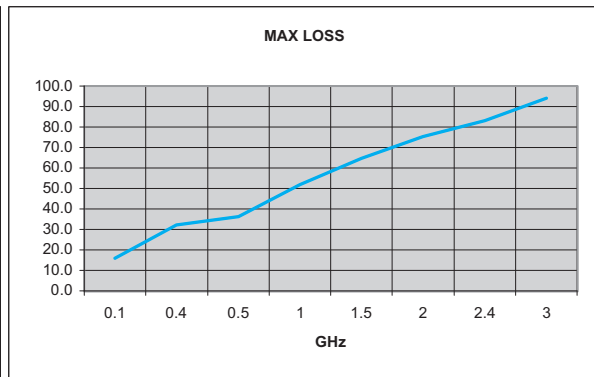
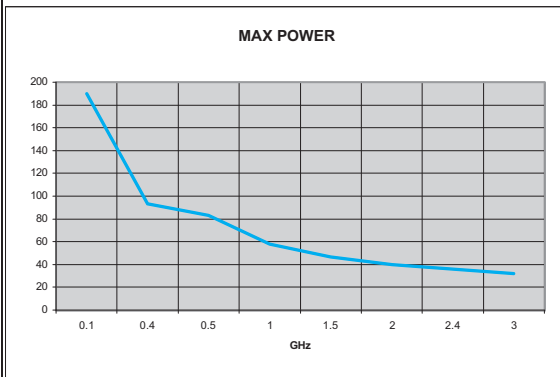
CENTER CONDUCTOR DC RESISTANCE 6.81 OHMS / 100 FEET NOMINAL
OUTER CONDUCTOR DC RESISTANCE 18.01 OHMS / 100 FEET NOMINAL
NOMINAL IMPEDANCE: 50 OHMS
NOMINAL CAPACITANCE: 28.7 pf / FT.
NOMINAL INDUCTANCE: 0.072 uh / FT
NOMINAL VELOCITY OF PROPAGATION: 70.7 %
NOMINAL DELAY: 1.44 nS / FT.
MAXIMUM OPERATING VOLTAGE: 788 VRMS
MAXIMUM CW POWER RATING: 32 WATTS AT 3 GHZ
MAXIMUM RETURN LOSS: -20 dB AT 3 GHZ
MAXIMUM INSERTION LOSS: 94.0 dB / 100 FT AT 3 GHZ
NOMINAL INSERTION LOSS: 87.8 dB / 100 FT AT 3 GHZ

To calculate maximum insertion loss at any frequency use the formula below:

$$49 \text{ times square root of freq.} + 3.030 \text{ times freq.} + 0 = \text{dB}/100'$$

RELATIVE SHIELDING: -40 dB SINGLE SHIELDED

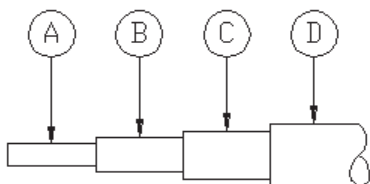
FEATURES:



Data subject to change

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TENSOLITE CABLE DATA SHEET



CABLE CODE: 187
CATEGORY: FLEXIBLE
DESCRIPTION: RG-316
IMPEDANCE: 50 OHMS
MAX. OD: 0.102 INCHES
MAX. OPERATING FREQ.: 3 GHz.
CUT OFF FREQ.: 65.2 GHz.
CLAMP CABLE GROUP: 805
SOLDER CABLE GROUP: N/A
CRIMP CABLE GROUP: 903
MIL SPEC: M17/113-RG316
FLORIDA PART X REF.: RG-316

ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	STRANDED SILVER PLATED COPPER CLAD STEEL	0.020
B. DIELECTRIC:	SOLID PTFE	0.060
C. OUTER BRAID:	SILVER PLATED COPPER WIRE BRAID	0.076
D. JACKET:	SOLID FEP	0.097

MECHANICAL CHARACTERISTICS:

OUTER CONDUCTOR INTEGRITY: 30 POUNDS MINIMUM AXIAL PULL
MINIMUM BEND RADIUS (ONE TIME): 0.58 INCHES FIXED INSTALLATION
PREFERRED BEND RADIUS: 1.94 INCHES
TEMPERATURE RANGE: -55 / +200 DEGREES CELSIUS
WEIGHT MAXIMUM: 0.013 POUNDS PER FOOT

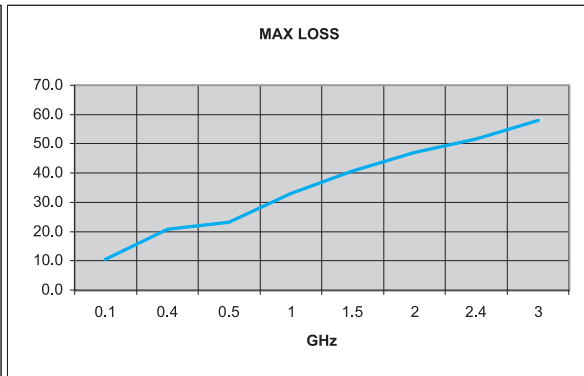
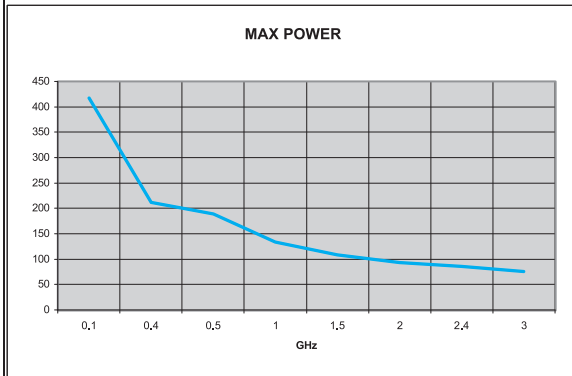
ELECTRICAL CHARACTERISTICS:

CENTER CONDUCTOR DC RESISTANCE 2.43 OHMS / 100 FEET NOMINAL
OUTER CONDUCTOR DC RESISTANCE 10.81 OHMS / 100 FEET NOMINAL
NOMINAL IMPEDANCE: 50 OHMS
NOMINAL CAPACITANCE: 28.7 pf / FT.
NOMINAL INDUCTANCE: 0.072 uh / FT
NOMINAL VELOCITY OF PROPAGATION: 70.7 %
NOMINAL DELAY: 1.44 nS / FT.
MAXIMUM OPERATING VOLTAGE: 1422 VRMS
MAXIMUM CW POWER RATING: 76 WATTS AT 3 GHz
MAXIMUM RETURN LOSS: -20 dB AT 3 GHz
MAXIMUM INSERTION LOSS: 58.1 dB / 100 FT AT 3 GHz
NOMINAL INSERTION LOSS: 54.3 dB / 100 FT AT 3 GHz

To calculate maximum insertion loss at any frequency use the formula below:

31.5 times square root of freq. + 1,000 times freq. + 0.5 = dB/100'
RELATIVE SHIELDING: -40 dB SINGLE SHIELDED

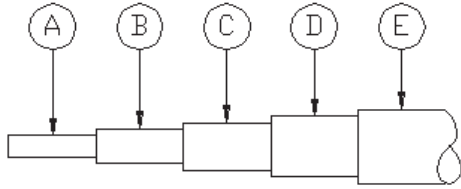
FEATURES:



Data subject to change

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TENSOLITE CABLE DATA SHEET



CABLE CODE: 195
CATEGORY: FLEXIBLE
DESCRIPTION: LOW LOSS DB-316
IMPEDANCE: 50 OHMS
MAX. OD: 0.118 INCHES
MAX. OPERATING FREQ.: 12.4 GHZ.
CUT OFF FREQ.: 65.2 GHZ.
CLAMP CABLE GROUP: 805
SOLDER CABLE GROUP: 195
CRIMP CABLE GROUP: 195 / 511 / 903*
MIL SPEC: MODIFIED M17/152-00001
FLORIDA PART X REF.: MODIFIED DB-316

ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	STRANDED SILVER PLATED COPPER CLAD STEEL	0.020
B. DIELECTRIC:	SOLID PTFE	0.060
C. INNER BRAID:	SILVER PLATED COPPER WIRE BRAID	0.076
D. OUTER BRAID:	SILVER PLATED COPPER WIRE BRAID	0.092
E. JACKET:	SOLID FEP	0.113

MECHANICAL CHARACTERISTICS:

OUTER CONDUCTOR INTEGRITY: 30 POUNDS MINIMUM AXIAL PULL
MINIMUM BEND RADIUS (ONE TIME): 0.68 INCHES FIXED INSTALLATION
PREFERRED BEND RADIUS: 2.26 INCHES
TEMPERATURE RANGE: -55 / +200 DEGREES CELSIUS
WEIGHT MAXIMUM: 0.018 POUNDS PER FOOT

ELECTRICAL CHARACTERISTICS:

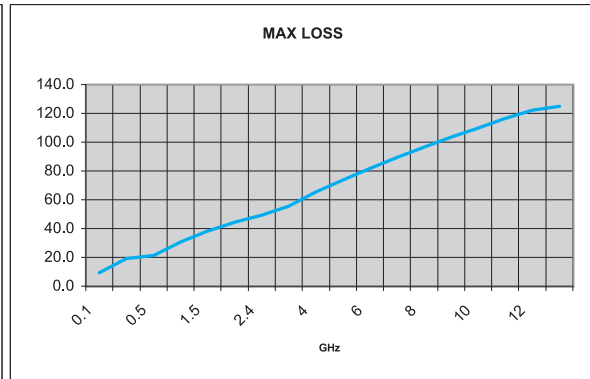
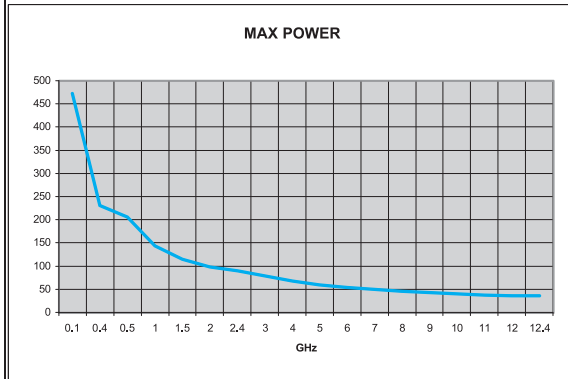
CENTER CONDUCTOR DC RESISTANCE 2.43 OHMS / 100 FEET NOMINAL
OUTER CONDUCTOR DC RESISTANCE 9.00 OHMS / 100 FEET NOMINAL
NOMINAL IMPEDANCE: 50 OHMS
NOMINAL CAPACITANCE: 28.7 pf / FT.
NOMINAL INDUCTANCE: 0.072 uh / FT
NOMINAL VELOCITY OF PROPAGATION: 70.7 %
NOMINAL DELAY: 1.44 nS / FT.
MAXIMUM OPERATING VOLTAGE: 1422 VRMS
MAXIMUM CW POWER RATING: 35 WATTS AT 12.4 GHZ
MAXIMUM RETURN LOSS: -23 dB AT 12.4 GHZ
MAXIMUM INSERTION LOSS: 124.8 dB / 100 FT AT 12.4 GHZ
NOMINAL INSERTION LOSS: 116.7 dB / 100 FT AT 12.4 GHZ

To calculate maximum insertion loss at any frequency use the formula below:

$$28.9 \text{ times square root of freq.} + 1.860 \text{ times freq.} + 0 = \text{dB}/100'$$

RELATIVE SHIELDING: -60 dB DOUBLE SHIELDED

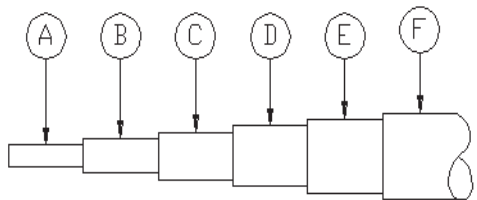
FEATURES: LOWER LOSS THAN STANDARD M17/152-00001 CABLE



Data subject to change

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TENSOLITE CABLE DATA SHEET



CABLE CODE:	511
CATEGORY:	FLEXIBLE
DESCRIPTION:	ULTRAFLEX
IMPEDANCE:	50 OHMS
MAX. OD:	0.124 INCHES
MAX. OPERATING FREQ.:	8 GHz.
CUT OFF FREQ.:	62.5 GHz.
CLAMP CABLE GROUP:	805
SOLDER CABLE GROUP:	N/A
CRIMP CABLE GROUP:	903
MIL SPEC:	N/A
FLORIDA PART X REF.:	N/A

ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	STRANDED SILVER PLATED COPPER WIRE	0.019
B. DIELECTRIC:	POLYETHYLENE	0.060
C. INNER BRAID	SILVER PLATED COPPER WIRE	0.077
D. INTERLAYER	ALUMINUM / POLYESTER FOIL	0.083
E. OUTER BRAID	SILVER PLATED COPPER WIRE	0.100
F. JACKET	GRAY POLYURETHANE	0.119

MECHANICAL CHARACTERISTICS:

OUTER CONDUCTOR INTEGRITY:	30 POUNDS MINIMUM AXIAL PULL
MINIMUM BEND RADIUS (ONE TIME):	0.71 INCHES FIXED INSTALLATION
PREFERRED BEND RADIUS:	2.38 INCHES
TEMPERATURE RANGE:	-40 / +85 DEGREES CELSIUS
WEIGHT MAXIMUM:	0.012 POUNDS PER FOOT

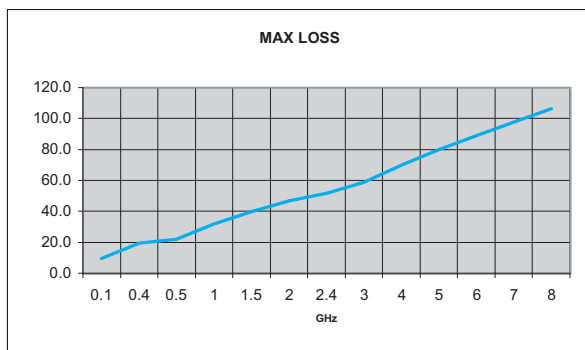
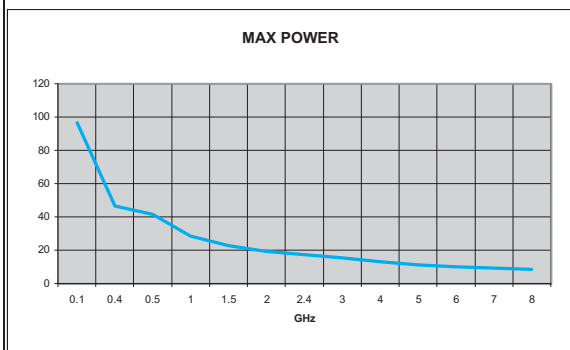
ELECTRICAL CHARACTERISTICS:

CENTER CONDUCTOR DC RESISTANCE	2.74 OHMS / 100 FEET NOMINAL
OUTER CONDUCTOR DC RESISTANCE	3.87 OHMS / 100 FEET NOMINAL
NOMINAL IMPEDANCE:	50 OHMS
NOMINAL CAPACITANCE:	30.3 pf / FT.
NOMINAL INDUCTANCE:	0.076 uh / FT
NOMINAL VELOCITY OF PROPAGATION:	67.0 %
NOMINAL DELAY:	1.52 nS / FT.
MAXIMUM OPERATING VOLTAGE:	1409 VRMS
MAXIMUM CW POWER RATING:	8 WATTS AT 8 GHz
MAXIMUM RETURN LOSS:	-20 dB AT 8 GHz
MAXIMUM INSERTION LOSS:	106.2 dB / 100 FT AT 8 GHz
NOMINAL INSERTION LOSS:	99.2 dB / 100 FT AT 8 GHz

To calculate maximum insertion loss at any frequency use the formula below:

28.461 times square root of freq. +	3.212 times freq. +	0 = dB/100'
RELATIVE SHIELDING:	-100 dB	TRIPLE SHIELDED

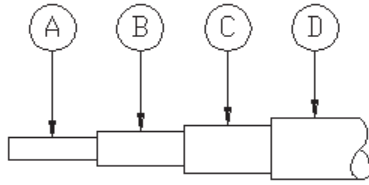
FEATURES: HIGHLY FLEXIBLE WITH RUGGED JACKET
ACCEPTS MOST DOUBLE SHIELDED RG316 CONNECTORS



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TENSOLITE CABLE DATA SHEET



CABLE CODE:	115
CATEGORY:	FLEXIBLE
DESCRIPTION:	M17/28-RG58
IMPEDANCE:	50 OHMS
MAX. OD:	0.199 INCHES
MAX. OPERATING FREQ.:	1 GHz.
CUT OFF FREQ.:	31.4 GHz.
CLAMP CABLE GROUP:	803
SOLDER CABLE GROUP:	N/A
CRIMP CABLE GROUP:	910
MIL SPEC:	M17/28-RG58
FLORIDA PART X REF.:	N/A

ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	STRANDED TIN PLATED COPPER WIRE	0.036
B. DIELECTRIC:	SOLID POLYETHYLENE	0.117
C. OUTER BRAID:	TIN PLATED COPPER WIRE BRAID	0.137
D. JACKET:	BLACK POLYVINYLCHLORIDE	0.195

MECHANICAL CHARACTERISTICS:

OUTER CONDUCTOR INTEGRITY:	30 POUNDS MINIMUM AXIAL PULL
MINIMUM BEND RADIUS (ONE TIME):	1.17 INCHES FIXED INSTALLATION
PREFERRED BEND RADIUS:	3.90 INCHES
TEMPERATURE RANGE:	-40 / +85 DEGREES CELSIUS
WEIGHT MAXIMUM:	0.032 POUNDS PER FOOT

ELECTRICAL CHARACTERISTICS:

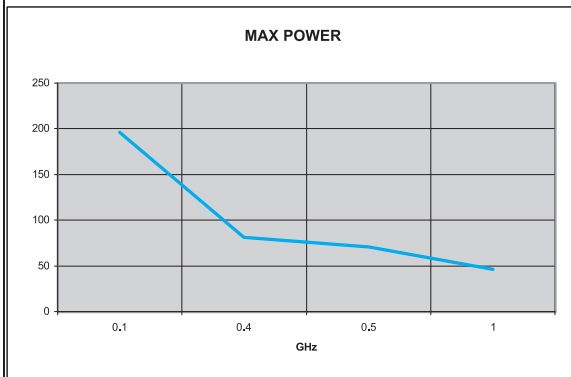
CENTER CONDUCTOR DC RESISTANCE	0.89 OHMS / 100 FEET NOMINAL
OUTER CONDUCTOR DC RESISTANCE	5.85 OHMS / 100 FEET NOMINAL
NOMINAL IMPEDANCE:	50 OHMS
NOMINAL CAPACITANCE:	30.8 pf / FT.
NOMINAL INDUCTANCE:	0.077 uh / FT
NOMINAL VELOCITY OF PROPAGATION:	66.0 %
NOMINAL DELAY:	1.54 nS / FT.
MAXIMUM OPERATING VOLTAGE:	2664 VRMS
MAXIMUM CW POWER RATING:	46 WATTS AT 1 GHz
MAXIMUM RETURN LOSS:	-24 dB AT 1 GHz
MAXIMUM INSERTION LOSS:	28.0 dB / 100 FT AT 1 GHz
NOMINAL INSERTION LOSS:	26.2 dB / 100 FT AT 1 GHz

To calculate maximum insertion loss at any frequency use the formula below:

26 times square root of freq. +	4.000 times freq. +	-2 = dB/100'
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RELATIVE SHIELDING: -40 dB SINGLE SHIELDED

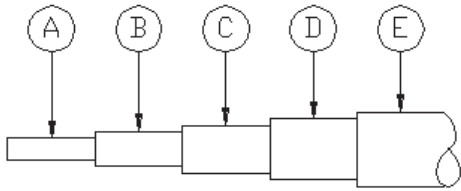
FEATURES:



Data subject to change

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TENSOLITE CABLE DATA SHEET



CABLE CODE: 132
CATEGORY: FLEXIBLE
DESCRIPTION: RG-142
IMPEDANCE: 50 OHMS
MAX. OD: 0.200 INCHES
MAX. OPERATING FREQ.: 8 GHz.
CUT OFF FREQ.: 34.6 GHz.
CLAMP CABLE GROUP: 803
SOLDER CABLE GROUP: 803
CRIMP CABLE GROUP: 910
MIL SPEC: M17/60-RG142
FLORIDA PART X REF.: RG-142

ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	SOLID SILVER PLATED COPPER WELD STEEL	0.036
B. DIELECTRIC:	SOLID PTFE	0.117
C. INNER BRAID:	SILVER PLATED COPPER WIRE BRAID	0.137
D. OUTER BRAID:	SILVER PLATED COPPER WIRE BRAID	0.157
E. JACKET:	SOLID FEP	0.195

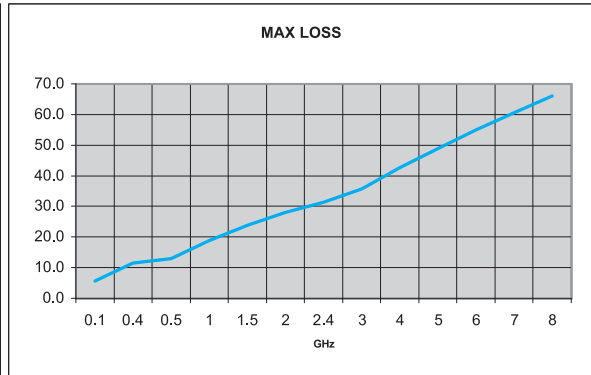
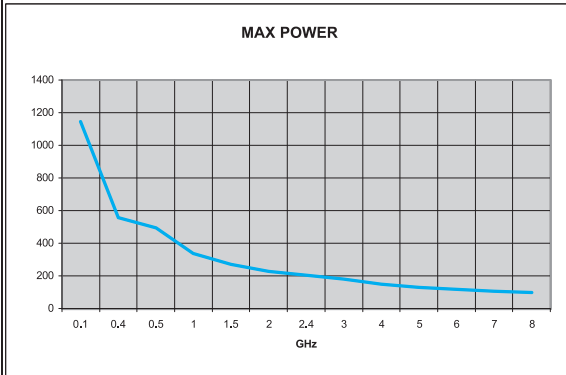
MECHANICAL CHARACTERISTICS:

OUTER CONDUCTOR INTEGRITY: 60 POUNDS MINIMUM AXIAL PULL
MINIMUM BEND RADIUS (ONE TIME): 1.17 INCHES FIXED INSTALLATION
PREFERRED BEND RADIUS: 3.90 INCHES
TEMPERATURE RANGE: -55 / +200 DEGREES CELSIUS
WEIGHT MAXIMUM: 0.047 POUNDS PER FOOT

ELECTRICAL CHARACTERISTICS:

CENTER CONDUCTOR DC RESISTANCE 0.76 OHMS / 100 FEET NOMINAL
OUTER CONDUCTOR DC RESISTANCE 3.11 OHMS / 100 FEET NOMINAL
NOMINAL IMPEDANCE: 50 OHMS
NOMINAL CAPACITANCE: 28.7 pf / FT.
NOMINAL INDUCTANCE: 0.072 uh / FT
NOMINAL VELOCITY OF PROPAGATION: 70.7 %
NOMINAL DELAY: 1.44 nS / FT.
MAXIMUM OPERATING VOLTAGE: 1875 VRMS
MAXIMUM CW POWER RATING: 97 WATTS AT 8 GHz
MAXIMUM RETURN LOSS: -19 dB AT 8 GHz
MAXIMUM INSERTION LOSS: 66.0 dB / 100 FT AT 8 GHz
NOMINAL INSERTION LOSS: 61.7 dB / 100 FT AT 8 GHz
 To calculate maximum insertion loss at any frequency use the formula below:
 $16.15 \text{ times square root of freq.} + 2.510 \text{ times freq.} + 0.24 = \text{dB}/100'$
RELATIVE SHIELDING: -70 dB DOUBLE SHIELDED

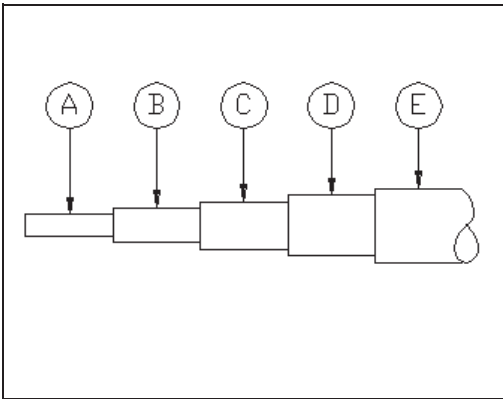
FEATURES:



Data subject to change

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TENSOLITE CABLE DATA SHEET



CABLE CODE: 190
CATEGORY: FLEXIBLE
DESCRIPTION: RG-400
IMPEDANCE: 50 OHMS
MAX. OD: 0.200 INCHES
MAX. OPERATING FREQ.: 12.4 GHz.
CUT OFF FREQ.: 33.1 GHz.
CLAMP CABLE GROUP: 803
SOLDER CABLE GROUP: 803
CRIMP CABLE GROUP: 910
MIL SPEC: M17/128-RG400
FLORIDA PART X REF.: RG-400

ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	STRANDED SILVER PLATED COPPER WIRE	0.038
B. DIELECTRIC:	SOLID PTFE	0.117
C. INNER BRAID:	SILVER PLATED COPPER WIRE BRAID	0.137
D. OUTER BRAID:	SILVER PLATED COPPER WIRE BRAID	0.157
E. JACKET:	SOLID FEP	0.195

MECHANICAL CHARACTERISTICS:

OUTER CONDUCTOR INTEGRITY: 60 POUNDS MINIMUM AXIAL PULL
MINIMUM BEND RADIUS (ONE TIME): 1.17 INCHES FIXED INSTALLATION
PREFERRED BEND RADIUS: 3.90 INCHES
TEMPERATURE RANGE: -55 / +200 DEGREES CELSIUS
WEIGHT MAXIMUM: 0.047 POUNDS PER FOOT

ELECTRICAL CHARACTERISTICS:

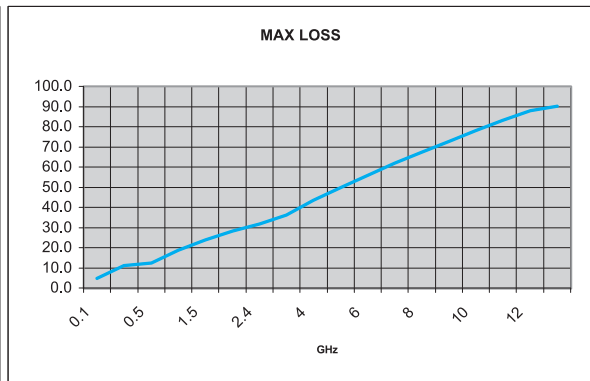
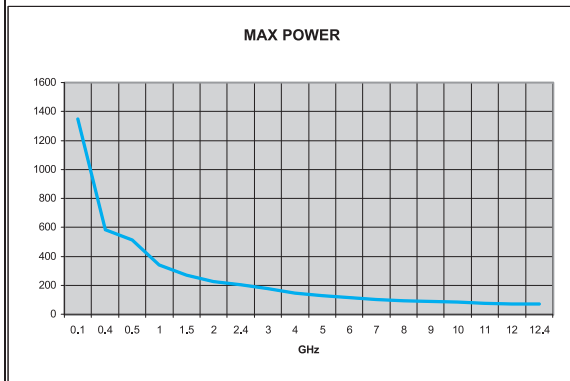
CENTER CONDUCTOR DC RESISTANCE 0.66 OHMS / 100 FEET NOMINAL
OUTER CONDUCTOR DC RESISTANCE 4.94 OHMS / 100 FEET NOMINAL
NOMINAL IMPEDANCE: 50 OHMS
NOMINAL CAPACITANCE: 28.7 pf / FT.
NOMINAL INDUCTANCE: 0.072 uh / FT
NOMINAL VELOCITY OF PROPAGATION: 70.7 %
NOMINAL DELAY: 1.44 nS / FT.
MAXIMUM OPERATING VOLTAGE: 2695 VRMS
MAXIMUM CW POWER RATING: 71 WATTS AT 12.4 GHz
MAXIMUM RETURN LOSS: -17 dB AT 12.4 GHz
MAXIMUM INSERTION LOSS: 90.0 dB / 100 FT AT 12.4 GHz
NOMINAL INSERTION LOSS: 84.1 dB / 100 FT AT 12.4 GHz

To calculate maximum insertion loss at any frequency use the formula below:

$$17.4 \text{ times square root of freq.} + 2.400 \text{ times freq.} + -1 = \text{dB}/100'$$

RELATIVE SHIELDING: -70 dB DOUBLE SHIELDED

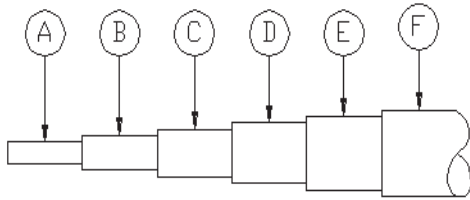
FEATURES:



Data subject to change

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TENSOLITE CABLE DATA SHEET



CABLE CODE:	301
CATEGORY:	FLEXIBLE
DESCRIPTION:	LOW LOSS
IMPEDANCE:	50 OHMS
MAX. OD:	0.200 INCHES
MAX. OPERATING FREQ.:	18 GHz.
CUT OFF FREQ.:	30.7 GHz.
CLAMP CABLE GROUP:	N/A
SOLDER CABLE GROUP:	301
CRIMP CABLE GROUP:	301
MIL SPEC:	N/A
FLORIDA PART X REF.:	N/A

ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	SILVER PLATED COPPER WIRE	0.051
B. DIELECTRIC:	AIR SPACED PTFE	0.145
C. INNER BRAID	FLAT SILVER PLATED COPPER STRIP	0.152
D. INTERLAYER	ALUMINUM / POLYESTER FOIL	0.157
E. OUTER BRAID	SILVER PLATED COPPER WIRE	0.177
F. JACKET	GRAY TINT FEP	0.195

MECHANICAL CHARACTERISTICS:

OUTER CONDUCTOR INTEGRITY:	60 POUNDS MINIMUM AXIAL PULL
MINIMUM BEND RADIUS (ONE TIME):	1.17 INCHES FIXED INSTALLATION
PREFERRED BEND RADIUS:	3.90 INCHES
TEMPERATURE RANGE:	-55 / +200 DEGREES CELSIUS
WEIGHT MAXIMUM:	0.048 POUNDS PER FOOT

ELECTRICAL CHARACTERISTICS:

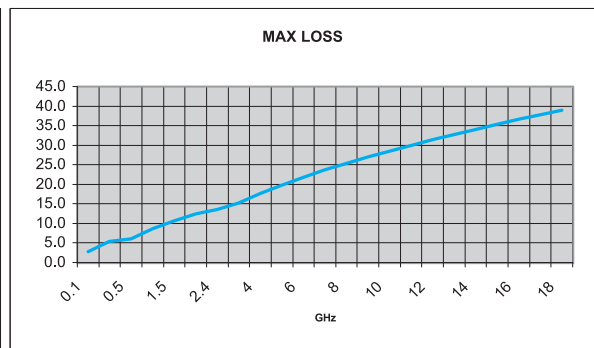
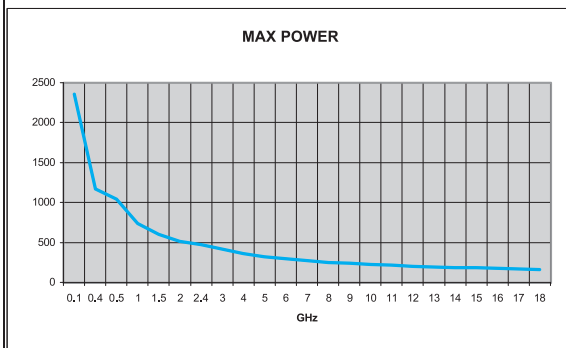
CENTER CONDUCTOR DC RESISTANCE	0.38 OHMS / 100 FEET NOMINAL
OUTER CONDUCTOR DC RESISTANCE	2.07 OHMS / 100 FEET NOMINAL
NOMINAL IMPEDANCE:	50 OHMS
NOMINAL CAPACITANCE:	25.4 pf / FT.
NOMINAL INDUCTANCE:	0.064 uh / FT
NOMINAL VELOCITY OF PROPAGATION:	80.0 %
NOMINAL DELAY:	1.27 nS / FT.
MAXIMUM OPERATING VOLTAGE:	2349 VRMS
MAXIMUM CW POWER RATING:	169 WATTS AT 18 GHz
MAXIMUM RETURN LOSS:	-22 dB AT 18 GHz
MAXIMUM INSERTION LOSS:	39.0 dB / 100 FT AT 18 GHz
NOMINAL INSERTION LOSS:	36.8 dB / 100 FT AT 18 GHz

To calculate maximum insertion loss at any frequency use the formula below:

$$8.55 \text{ times square root of freq. } + 0.150 \text{ times freq. } + 0 = \text{dB}/100'$$

RELATIVE SHIELDING: -100 dB TRIPLE SHIELDED

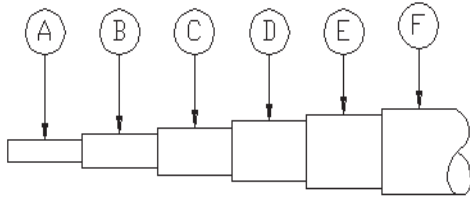
FEATURES: LOWEST LOSS .200 DIAMETER CABLE
MAINTAINS ELECTRICAL CHARACTERISTICS WITH FLEXING



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TENSOLITE CABLE DATA SHEET



CABLE CODE: 504
CATEGORY: FLEXIBLE
DESCRIPTION: HIGH PERFORMANCE
IMPEDANCE: 50 OHMS
MAX. OD: 0.200 INCHES
MAX. OPERATING FREQ.: 26.5 GHz.
CUT OFF FREQ.: 34.1 GHz.
CLAMP CABLE GROUP: 803
SOLDER CABLE GROUP: 402, 504
CRIMP CABLE GROUP: 910
MIL SPEC: N/A
FLORIDA PART X REF.: 504

ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	SILVER PLATED COPPER WELD STEEL	0.037
B. DIELECTRIC:	SOLID PTFE	0.117
C. INNER BRAID	FLAT SILVER PLATED COPPER STRIP BRAID	0.127
D. INTERLAYER	ALUMINUM / POLYESTER FOIL	0.134
E. OUTER BRAID	SILVER PLATED COPPER WIRE	0.154
F. JACKET	BROWN TINT FEP	0.195

MECHANICAL CHARACTERISTICS:

OUTER CONDUCTOR INTEGRITY: 60 POUNDS MINIMUM AXIAL PULL
MINIMUM BEND RADIUS (ONE TIME): 1.17 INCHES FIXED INSTALLATION
PREFERRED BEND RADIUS: 3.90 INCHES
TEMPERATURE RANGE: -55 / +200 DEGREES CELSIUS
WEIGHT MAXIMUM: 0.048 POUNDS PER FOOT

ELECTRICAL CHARACTERISTICS:

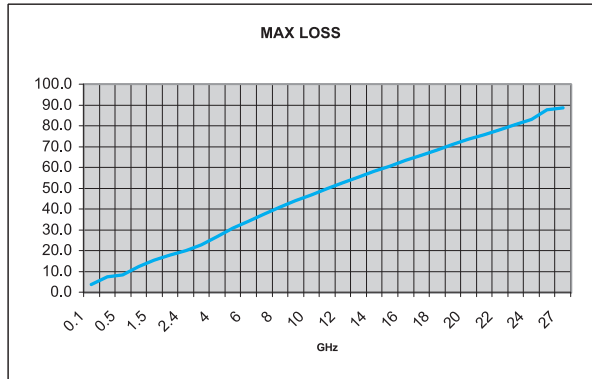
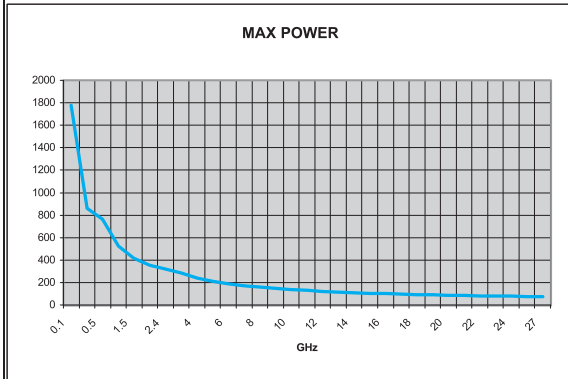
CENTER CONDUCTOR DC RESISTANCE 0.73 OHMS / 100 FEET NOMINAL
OUTER CONDUCTOR DC RESISTANCE 3.29 OHMS / 100 FEET NOMINAL
NOMINAL IMPEDANCE: 50 OHMS
NOMINAL CAPACITANCE: 28.7 pf / FT.
NOMINAL INDUCTANCE: 0.072 uh / FT
NOMINAL VELOCITY OF PROPAGATION: 70.7 %
NOMINAL DELAY: 1.44 nS / FT.
MAXIMUM OPERATING VOLTAGE: 1879 VRMS
MAXIMUM CW POWER RATING: 72 WATTS AT 26.5 GHz
MAXIMUM RETURN LOSS: -22 dB AT 26.5 GHz
MAXIMUM INSERTION LOSS: 88.7 dB / 100 FT AT 26.5 GHz
NOMINAL INSERTION LOSS: 82.9 dB / 100 FT AT 26.5 GHz

To calculate maximum insertion loss at any frequency use the formula below:

$$11 \text{ times square root of freq. } + 1.210 \text{ times freq. } + 0 = \text{dB}/100'$$

RELATIVE SHIELDING: -100 dB TRIPLE SHIELDED

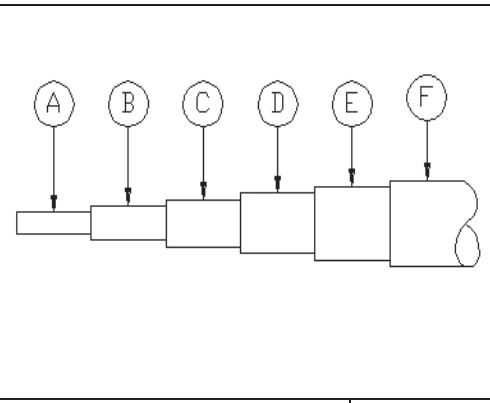
FEATURES: AVAILABLE ON TENSOLITE ASSEMBLIES ONLY



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TENSOLITE CABLE DATA SHEET



CABLE CODE:	510
CATEGORY:	FLEXIBLE
DESCRIPTION:	SUPERFLEX
IMPEDANCE:	50 OHMS
MAX. OD:	0.217 INCHES
MAX. OPERATING FREQ.:	8 GHZ.
CUT OFF FREQ.:	32.3 GHZ.
CLAMP CABLE GROUP:	803
SOLDER CABLE GROUP:	N/A
CRIMP CABLE GROUP:	910
MIL SPEC:	N/A
FLORIDA PART X REF.:	N/A

ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	STRANDED SILVER PLATED COPPER WIRE	0.036
B. DIELECTRIC:	POLYETHYLENE	0.116
C. INNER BRAID	SILVER PLATED COPPER WIRE	0.137
D. INTERLAYER	ALUMINUM / POLYESTER FOIL	0.143
E. OUTER BRAID	SILVER PLATED COPPER WIRE	0.165
F. JACKET	GRAY POLYURETHANE	0.212

MECHANICAL CHARACTERISTICS:

OUTER CONDUCTOR INTEGRITY:	60 POUNDS MINIMUM AXIAL PULL
MINIMUM BEND RADIUS (ONE TIME):	1.27 INCHES FIXED INSTALLATION
PREFERRED BEND RADIUS:	4.24 INCHES
TEMPERATURE RANGE:	-40 / +85 DEGREES CELSIUS
WEIGHT MAXIMUM:	0.043 POUNDS PER FOOT

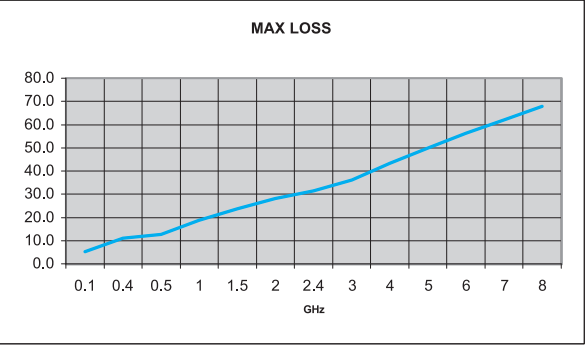
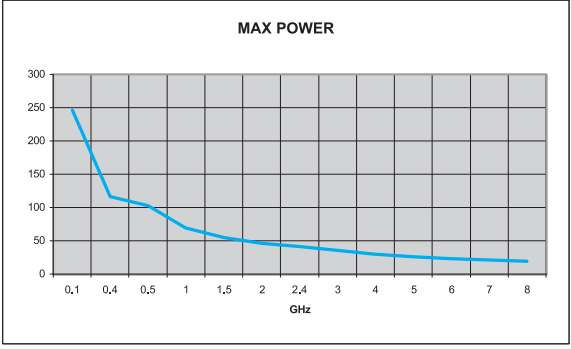
ELECTRICAL CHARACTERISTICS:

CENTER CONDUCTOR DC RESISTANCE	0.78 OHMS / 100 FEET NOMINAL
OUTER CONDUCTOR DC RESISTANCE	2.48 OHMS / 100 FEET NOMINAL
NOMINAL IMPEDANCE:	50 OHMS
NOMINAL CAPACITANCE:	30.3 pf / FT.
NOMINAL INDUCTANCE:	0.076 uh / FT
NOMINAL VELOCITY OF PROPAGATION:	67.0 %
NOMINAL DELAY:	1.52 nS / FT.
MAXIMUM OPERATING VOLTAGE:	2645 VRMS
MAXIMUM CW POWER RATING:	19 WATTS AT 8 GHZ
MAXIMUM RETURN LOSS:	-23 dB AT 8 GHZ
MAXIMUM INSERTION LOSS:	68.0 dB / 100 FT AT 8 GHZ
NOMINAL INSERTION LOSS:	63.5 dB / 100 FT AT 8 GHZ

To calculate maximum insertion loss at any frequency use the formula below:
 15.752 times square root of freq. + 2.929 times freq. + 0 = dB/100'

RELATIVE SHIELDING:	-100 dB	TRIPLE SHIELDED
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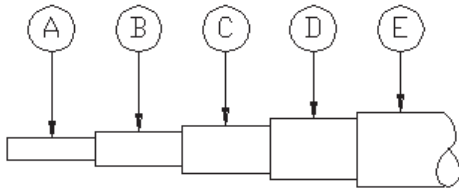
FEATURES: HIGHLY FLEXIBLE WITH RUGGED JACKET
 ACCEPTS MOST DOUBLE RG142 CONNECTORS



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Flexible Cables

TENSOLITE CABLE DATA SHEET



CABLE CODE:	174
CATEGORY:	FLEXIBLE
DESCRIPTION:	RG-223
IMPEDANCE:	50 OHMS
MAX. OD:	0.216 INCHES
MAX. OPERATING FREQ.:	12.4 GHz.
CUT OFF FREQ.:	32.1 GHz.
CLAMP CABLE GROUP:	803
SOLDER CABLE GROUP:	N/A
CRIMP CABLE GROUP:	910
MIL SPEC:	M17/84-RG223
FLORIDA PART X REF.:	N/A

ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	SILVER PLATED COPPER WIRE	0.035
B. DIELECTRIC:	SOLID POLYETHLENE	0.116
C. INNER BRAID:	SILVER PLATED COPPER WIRE	0.136
D. OUTER BRAID:	SILVER PLATED COPPER WIRE	0.156
E. JACKET:	BLACK POLYVINYLCHLORIDE	0.212

MECHANICAL CHARACTERISTICS:

OUTER CONDUCTOR INTEGRITY:	60 POUNDS MINIMUM AXIAL PULL
MINIMUM BEND RADIUS (ONE TIME):	1.27 INCHES FIXED INSTALLATION
PREFERRED BEND RADIUS:	4.24 INCHES
TEMPERATURE RANGE:	-55 / +84 DEGREES CELSIUS
WEIGHT MAXIMUM:	0.041 POUNDS PER FOOT

ELECTRICAL CHARACTERISTICS:

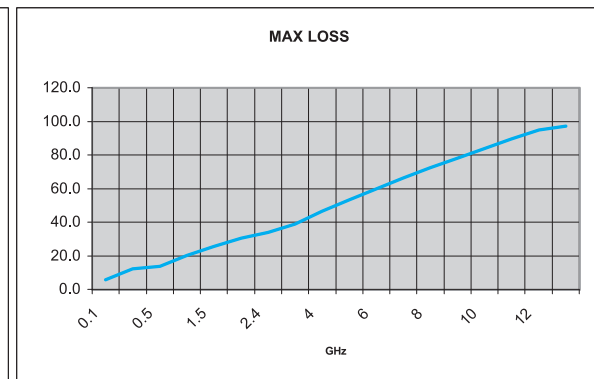
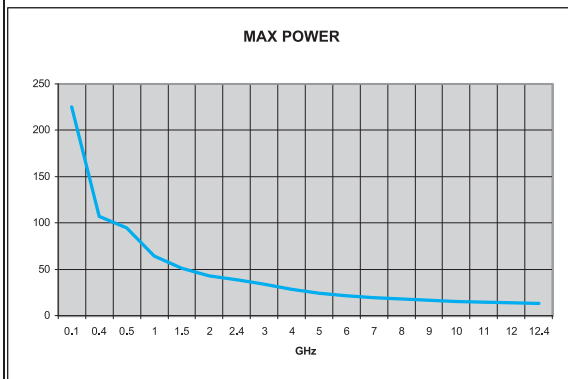
CENTER CONDUCTOR DC RESISTANCE	0.80 OHMS / 100 FEET NOMINAL
OUTER CONDUCTOR DC RESISTANCE	5.76 OHMS / 100 FEET NOMINAL
NOMINAL IMPEDANCE:	50 OHMS
NOMINAL CAPACITANCE:	30.3 pf / FT.
NOMINAL INDUCTANCE:	0.076 uh / FT
NOMINAL VELOCITY OF PROPAGATION:	67.0 %
NOMINAL DELAY:	1.52 nS / FT.
MAXIMUM OPERATING VOLTAGE:	1853 VRMS
MAXIMUM CW POWER RATING:	13 WATTS AT 12.4 GHz
MAXIMUM RETURN LOSS:	-19.5 dB AT 12.4 GHz
MAXIMUM INSERTION LOSS:	97.1 dB / 100 FT AT 12.4 GHz
NOMINAL INSERTION LOSS:	90.7 dB / 100 FT AT 12.4 GHz

To calculate maximum insertion loss at any frequency use the formula below:

$$17.35 \text{ times square root of freq.} + 2.900 \text{ times freq.} + 0 = \text{dB}/100'$$

RELATIVE SHIELDING: -60 dB DOUBLE SHIELDED

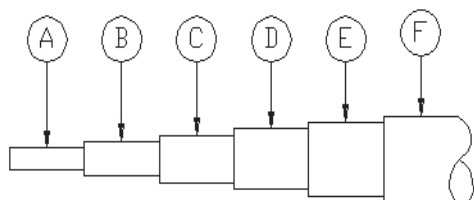
FEATURES:



Data subject to change

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TENSOLITE CABLE DATA SHEET



CABLE CODE:	521
CATEGORY:	FLEXIBLE
DESCRIPTION:	SUPERFLEX 75
IMPEDANCE:	75 OHMS
MAX. OD:	0.217 INCHES
MAX. OPERATING FREQ.:	3 GHz.
CUT OFF FREQ.:	36.9 GHz.
CLAMP CABLE GROUP:	521
SOLDER CABLE GROUP:	N/A
CRIMP CABLE GROUP:	521
MIL SPEC:	N/A
FLORIDA PART X REF.:	N/A

ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	STRANDED SILVER PLATED COPPER WIRE	0.019
B. DIELECTRIC:	POLYETHYLENE	0.117
C. INNER BRAID	SILVER PLATED COPPER WIRE	0.138
D. INTERLAYER	ALUMINUM / POLYESTER FOIL	0.147
E. OUTER BRAID	SILVER PLATED COPPER WIRE	0.168
F. JACKET	GREY POLYURETHANE	0.212

MECHANICAL CHARACTERISTICS:

OUTER CONDUCTOR INTEGRITY:	60 POUNDS MINIMUM AXIAL PULL
MINIMUM BEND RADIUS (ONE TIME):	1.27 INCHES FIXED INSTALLATION
PREFERRED BEND RADIUS:	4.24 INCHES
TEMPERATURE RANGE:	-50 / +85 DEGREES CELSIUS
WEIGHT MAXIMUM:	0.045 POUNDS PER FOOT

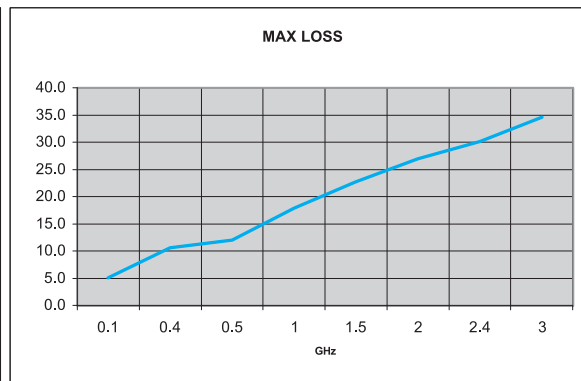
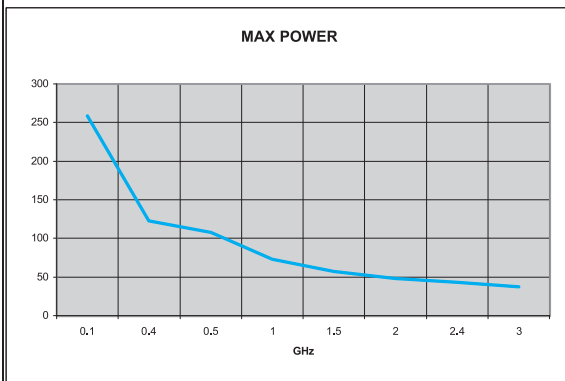
ELECTRICAL CHARACTERISTICS:

CENTER CONDUCTOR DC RESISTANCE	2.72 OHMS / 100 FEET NOMINAL
OUTER CONDUCTOR DC RESISTANCE	3.87 OHMS / 100 FEET NOMINAL
NOMINAL IMPEDANCE:	75 OHMS
NOMINAL CAPACITANCE:	20.3 pf / FT.
NOMINAL INDUCTANCE:	0.114 uh / FT
NOMINAL VELOCITY OF PROPAGATION:	66.8 %
NOMINAL DELAY:	1.52 nS / FT.
MAXIMUM OPERATING VOLTAGE:	2196 VRMS
MAXIMUM CW POWER RATING:	38 WATTS AT 3 GHz
MAXIMUM RETURN LOSS:	-23 dB AT 3 GHz
MAXIMUM INSERTION LOSS:	34.6 dB / 100 FT AT 3 GHz
NOMINAL INSERTION LOSS:	32.3 dB / 100 FT AT 3 GHz

To calculate maximum insertion loss at any frequency use the formula below:
 14.984 times square root of freq. + 2.883 times freq. + 0 = dB/100'

RELATIVE SHIELDING: -100 dB TRIPLE SHIELDED

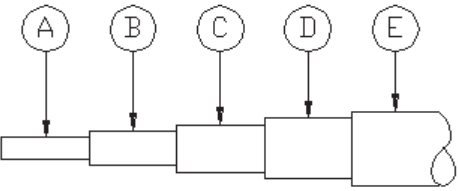
FEATURES:



Data subject to change

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TENSOLITE CABLE DATA SHEET

	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">CABLE CODE:</td> <td style="text-align: right;">163</td> </tr> <tr> <td>CATEGORY:</td> <td style="text-align: right;">FLEXIBLE</td> </tr> <tr> <td>DESCRIPTION:</td> <td style="text-align: right;">RG-214</td> </tr> <tr> <td>IMPEDANCE:</td> <td style="text-align: right;">50 OHMS</td> </tr> <tr> <td>MAX. OD:</td> <td style="text-align: right;">0.432 INCHES</td> </tr> <tr> <td>MAX. OPERATING FREQ.:</td> <td style="text-align: right;">11 GHz.</td> </tr> <tr> <td>CUT OFF FREQ.:</td> <td style="text-align: right;">13.3 GHz.</td> </tr> <tr> <td>CLAMP CABLE GROUP:</td> <td style="text-align: right;">802</td> </tr> <tr> <td>SOLDER CABLE GROUP:</td> <td style="text-align: right;">N/A</td> </tr> <tr> <td>CRIMP CABLE GROUP:</td> <td style="text-align: right;">905</td> </tr> <tr> <td>MIL SPEC:</td> <td style="text-align: right;">M17/75-RG214</td> </tr> <tr> <td>FLORIDA PART X REF.:</td> <td style="text-align: right;">N/A</td> </tr> </table>	CABLE CODE:	163	CATEGORY:	FLEXIBLE	DESCRIPTION:	RG-214	IMPEDANCE:	50 OHMS	MAX. OD:	0.432 INCHES	MAX. OPERATING FREQ.:	11 GHz.	CUT OFF FREQ.:	13.3 GHz.	CLAMP CABLE GROUP:	802	SOLDER CABLE GROUP:	N/A	CRIMP CABLE GROUP:	905	MIL SPEC:	M17/75-RG214	FLORIDA PART X REF.:	N/A
CABLE CODE:	163																								
CATEGORY:	FLEXIBLE																								
DESCRIPTION:	RG-214																								
IMPEDANCE:	50 OHMS																								
MAX. OD:	0.432 INCHES																								
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CUT OFF FREQ.:	13.3 GHz.																								
CLAMP CABLE GROUP:	802																								
SOLDER CABLE GROUP:	N/A																								
CRIMP CABLE GROUP:	905																								
MIL SPEC:	M17/75-RG214																								
FLORIDA PART X REF.:	N/A																								

ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	STRANDED SILVER PLATED COPPER WIRE	0.089
B. DIELECTRIC:	POLYETHYLENE	0.285
C. INNER BRAID:	SILVER PLATED COPPER WIRE	0.310
D. OUTER BRAID:	SILVER PLATED COPPER WIRE	0.335
E. JACKET:	BLACK POLYVINYLCHLORIDE	0.425

MECHANICAL CHARACTERISTICS:

OUTER CONDUCTOR INTEGRITY:	80 POUNDS MINIMUM AXIAL PULL
MINIMUM BEND RADIUS (ONE TIME):	2.55 INCHES FIXED INSTALLATION
PREFERRED BEND RADIUS:	8.50 INCHES
TEMPERATURE RANGE:	-40 / +85 DEGREES CELSIUS
WEIGHT MAXIMUM:	0.130 POUNDS PER FOOT

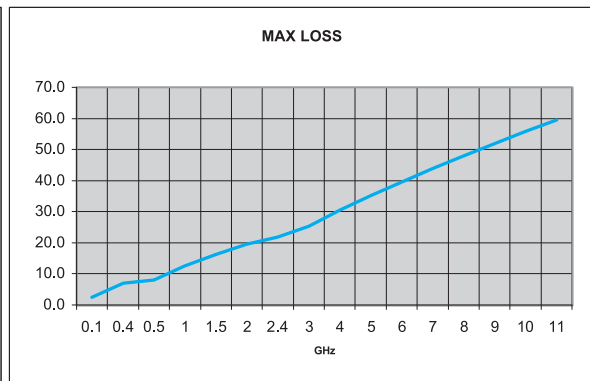
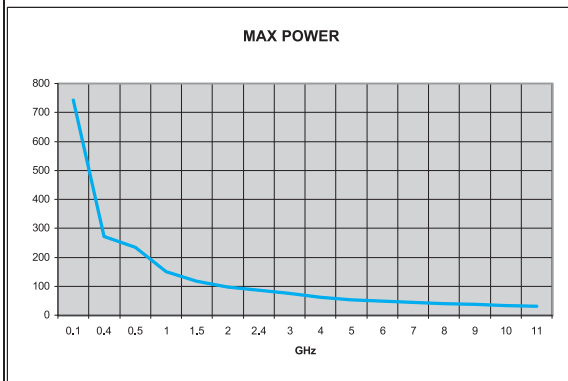
ELECTRICAL CHARACTERISTICS:

CENTER CONDUCTOR DC RESISTANCE	0.12 OHMS / 100 FEET NOMINAL	
OUTER CONDUCTOR DC RESISTANCE	2.07 OHMS / 100 FEET NOMINAL	
NOMINAL IMPEDANCE:	50 OHMS	
NOMINAL CAPACITANCE:	30.3 pf / FT.	
NOMINAL INDUCTANCE:	0.076 uh / FT	
NOMINAL VELOCITY OF PROPAGATION:	67.0 %	
NOMINAL DELAY:	1.52 nS / FT.	
MAXIMUM OPERATING VOLTAGE:	6685 VRMS	
MAXIMUM CW POWER RATING:	32 WATTS AT	11 GHz
MAXIMUM RETURN LOSS:	-17 dB AT	11 GHz
MAXIMUM INSERTION LOSS:	59.5 dB / 100 FT AT	11 GHz
NOMINAL INSERTION LOSS:	55.6 dB / 100 FT AT	11 GHz

To calculate maximum insertion loss at any frequency use the formula below:
 12.25 times square root of freq. + 1.850 times freq. + -1.5 = dB/100'

RELATIVE SHIELDING:	-60 dB	DOUBLE SHIELDED
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FEATURES:

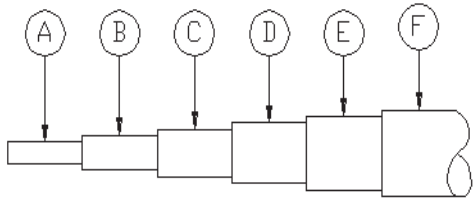


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Flexible Cables

TENSOLITE CABLE DATA SHEET



CABLE CODE:	404
CATEGORY:	FLEXIBLE
DESCRIPTION:	SF-214
IMPEDANCE:	50 OHMS
MAX. OD:	0.432 INCHES
MAX. OPERATING FREQ.:	13 GHz.
CUT OFF FREQ.:	13.3 GHz.
CLAMP CABLE GROUP:	802
SOLDER CABLE GROUP:	N/A
CRIMP CABLE GROUP:	905
MIL SPEC:	N/A
FLORIDA PART X REF.:	N/A

ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	STRANDED SILVER PLATED COPPER WIRE	0.089
B. DIELECTRIC:	SOLID POLYETHYLENE	0.285
C. INNER BRAID	FLAT SILVER PLATED COPPER STRIP	0.295
D. INTERLAYER	ALUMINUM / POLYESTER FOIL	0.304
E. OUTER BRAID	SILVER PLATED COPPER WIRE	0.329
F. JACKET	BLACK POLYVINYLCHLORIDE	0.425

MECHANICAL CHARACTERISTICS:

OUTER CONDUCTOR INTEGRITY:	80 POUNDS MINIMUM AXIAL PULL
MINIMUM BEND RADIUS (ONE TIME):	2.55 INCHES FIXED INSTALLATION
PREFERRED BEND RADIUS:	8.50 INCHES
TEMPERATURE RANGE:	-40 / +85 DEGREES CELSIUS
WEIGHT MAXIMUM:	0.134 POUNDS PER FOOT

ELECTRICAL CHARACTERISTICS:

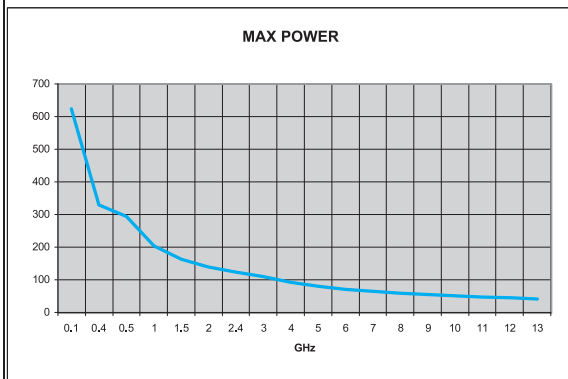
CENTER CONDUCTOR DC RESISTANCE	0.12 OHMS / 100 FEET NOMINAL	
OUTER CONDUCTOR DC RESISTANCE	2.07 OHMS / 100 FEET NOMINAL	
NOMINAL IMPEDANCE:	50 OHMS	
NOMINAL CAPACITANCE:	30.3 pf / FT.	
NOMINAL INDUCTANCE:	0.076 uh / FT	
NOMINAL VELOCITY OF PROPAGATION:	67.0 %	
NOMINAL DELAY:	1.52 nS / FT.	
MAXIMUM OPERATING VOLTAGE:	6685 VRMS	
MAXIMUM CW POWER RATING:	42 WATTS AT	13 GHz
MAXIMUM RETURN LOSS:	-17 dB AT	13 GHz
MAXIMUM INSERTION LOSS:	45.1 dB / 100 FT AT	13 GHz
NOMINAL INSERTION LOSS:	42.2 dB / 100 FT AT	13 GHz

To calculate maximum insertion loss at any frequency use the formula below:

7.3 times square root of freq. +	1.400 times freq. +	0.6 = dB/100'
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RELATIVE SHIELDING: -100 dB TRIPLE SHIELDED

FEATURES:



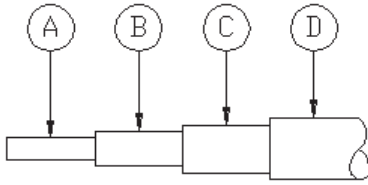
Data subject to change

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PRODUCT FEATURE BULLETINS

SEMI-RIGID AND SEMI-FLEX® CABLES

TENSOLITE CABLE DATA SHEET



CABLE CODE:	600
CATEGORY:	SEMI-FLEX(R)
DESCRIPTION:	.086 RIGID TYPE
IMPEDANCE:	50 OHMS
MAX. OD:	0.089 INCHES
MAX. OPERATING FREQ.:	26.5 GHz.
CUT OFF FREQ.:	62.0 GHz.
CLAMP CABLE GROUP:	N/A
SOLDER CABLE GROUP:	600, 977
CRIMP CABLE GROUP:	N/A
MIL SPEC:	N/A
FLORIDA PART X REF.:	N/A

ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	SILVER PLATED COPPER CLAD STEEL	0.020
B. DIELECTRIC:	SOLID PTFE	0.062
C. OUTER BRAID:	COPPER / POLYESTER FOIL	0.072
D. JACKET:	TIN FILLED HIGH STRENGTH WIRE BRAID	0.087

MECHANICAL CHARACTERISTICS:

OUTER CONDUCTOR INTEGRITY:	30 POUNDS MINIMUM AXIAL PULL
MINIMUM BEND RADIUS (ONE TIME):	0.13 INCHES FIXED INSTALLATION
PREFERRED BEND RADIUS:	0.38 INCHES
TEMPERATURE RANGE:	-50 / +200 DEGREES CELSIUS
WEIGHT MAXIMUM:	0.011 POUNDS PER FOOT

ELECTRICAL CHARACTERISTICS:

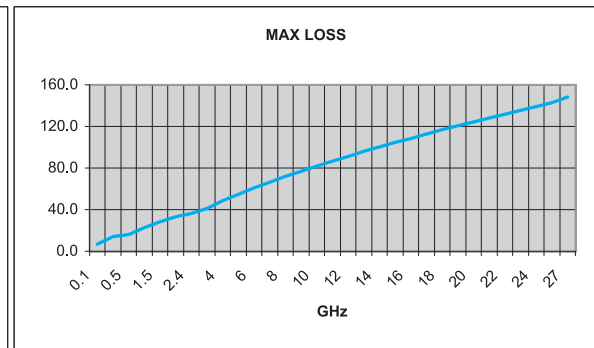
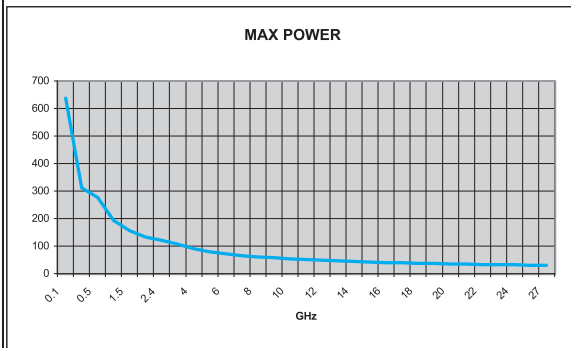
CENTER CONDUCTOR DC RESISTANCE	2.43 OHMS / 100 FEET NOMINAL
OUTER CONDUCTOR DC RESISTANCE	0.29 OHMS / 100 FEET NOMINAL
NOMINAL IMPEDANCE:	50 OHMS
NOMINAL CAPACITANCE:	28.7 pf / FT.
NOMINAL INDUCTANCE:	0.072 uh / FT
NOMINAL VELOCITY OF PROPAGATION:	70.7 %
NOMINAL DELAY:	1.44 nS / FT.
MAXIMUM OPERATING VOLTAGE:	1401 VRMS
MAXIMUM CW POWER RATING:	30 WATTS AT 26.5 GHz
MAXIMUM RETURN LOSS:	-16.5 dB AT 26.5 GHz
MAXIMUM INSERTION LOSS:	148.2 dB / 100 FT AT 26.5 GHz
NOMINAL INSERTION LOSS:	139.8 dB / 100 FT AT 26.5 GHz

To calculate maximum insertion loss at any frequency use the formula below:

$$21.412 \text{ times square root of freq.} + 1.434 \text{ times freq.} + 0 = \text{dB}/100'$$

RELATIVE SHIELDING: -100 dB DOUBLE SHIELDED

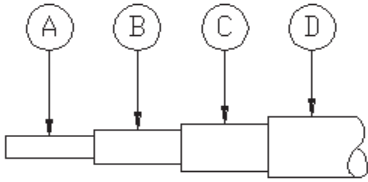
FEATURES: SEMI-RIGID REPLACEMENT CABLE AVAILABLE ON TENSOLITE ASSEMBLIES ONLY
EASILY FORMS INTO DESIRED SHAPE AND MAINTAINS ELECTRICAL PERFORMANCE



Data subject to change

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TENSOLITE CABLE DATA SHEET



CABLE CODE:	600
CATEGORY:	SEMI-FLEX(R)
DESCRIPTION:	.086 RIGID TYPE
IMPEDANCE:	50 OHMS
MAX. OD:	0.089 INCHES
MAX. OPERATING FREQ.:	40 GHz.
CUT OFF FREQ.:	62.0 GHz.
CLAMP CABLE GROUP:	N/A
SOLDER CABLE GROUP:	600, 977
CRIMP CABLE GROUP:	N/A
MIL SPEC:	N/A
FLORIDA PART X REF.:	N/A

ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	SILVER PLATED COPPER CLAD STEEL	0.020
B. DIELECTRIC:	SOLID PTFE	0.062
C. OUTER BRAID:	COPPER / POLYESTER FOIL	0.072
D. JACKET:	TIN FILLED HIGH STRENGTH WIRE BRAID	0.087

MECHANICAL CHARACTERISTICS:

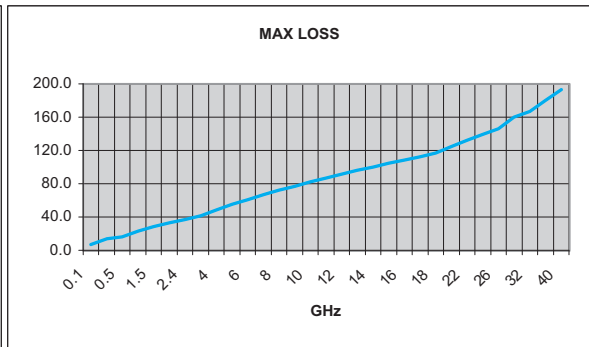
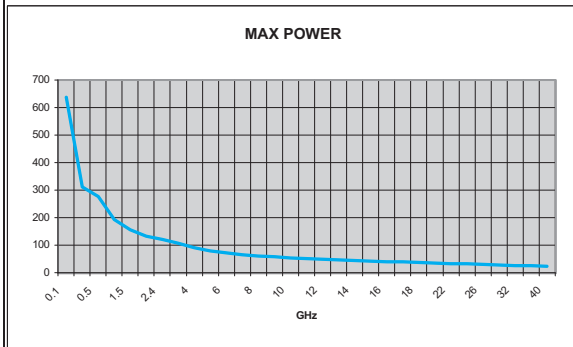
OUTER CONDUCTOR INTEGRITY:	30 POUNDS MINIMUM AXIAL PULL
MINIMUM BEND RADIUS (ONE TIME):	0.13 INCHES FIXED INSTALLATION
PREFERRED BEND RADIUS:	0.38 INCHES
TEMPERATURE RANGE:	-50 / +200 DEGREES CELSIUS
WEIGHT MAXIMUM:	0.011 POUNDS PER FOOT

ELECTRICAL CHARACTERISTICS:

CENTER CONDUCTOR DC RESISTANCE	2.43 OHMS / 100 FEET NOMINAL
OUTER CONDUCTOR DC RESISTANCE	0.29 OHMS / 100 FEET NOMINAL
NOMINAL IMPEDANCE:	50 OHMS
NOMINAL CAPACITANCE:	28.7 pf / FT.
NOMINAL INDUCTANCE:	0.072 uh / FT
NOMINAL VELOCITY OF PROPAGATION:	70.7 %
NOMINAL DELAY:	1.44 nS / FT.
MAXIMUM OPERATING VOLTAGE:	1401 VRMS
MAXIMUM CW POWER RATING:	23 WATTS AT 40 GHz
MAXIMUM RETURN LOSS:	-16 dB AT 40 GHz
MAXIMUM INSERTION LOSS:	192.8 dB / 100 FT AT 40 GHz
NOMINAL INSERTION LOSS:	181.9 dB / 100 FT AT 40 GHz

To calculate maximum insertion loss at any frequency use the formula below:
 21.412 times square root of freq. + 1.434 times freq. + 0 = dB/100'
 RELATIVE SHIELDING: -100 dB DOUBLE SHIELDED

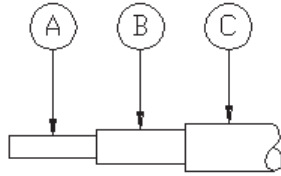
FEATURES: SEMI-RIGID REPLACEMENT CABLE AVAILABLE ON TENSOLITE ASSEMBLIES ONLY
 EASILY FORMS INTO DESIRED SHAPE AND MAINTAINS ELECTRICAL PERFORMANCE



Data subject to change

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TENSOLITE CABLE DATA SHEET



CABLE CODE: 617
CATEGORY: SEMI-FLEX(R) II
DESCRIPTION: .086 RIGID TYPE
IMPEDANCE: 50 OHMS
MAX. OD: 0.089 INCHES
MAX. OPERATING FREQ.: 20 GHz.
CUT OFF FREQ.: 62.0 GHz.
CLAMP CABLE GROUP: N/A
SOLDER CABLE GROUP: 977
CRIMP CABLE GROUP: 977
MIL SPEC: M17/133-00013
FLORIDA PART X REF.: N/A

ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	SILVER PLATED COPPER WELD STEEL	0.020
B. DIELECTRIC:	PTFE	0.066
C. JACKET:	TIN COATED ASTM B-211 ALUMINUM	0.086

MECHANICAL CHARACTERISTICS:

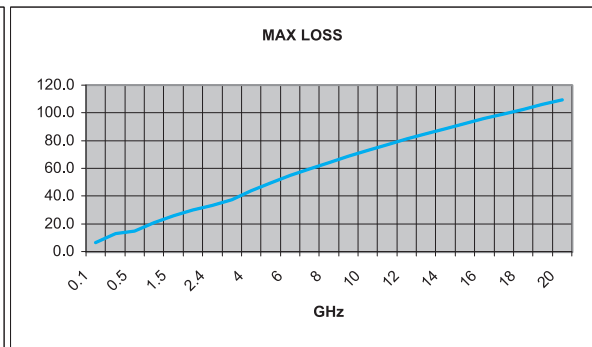
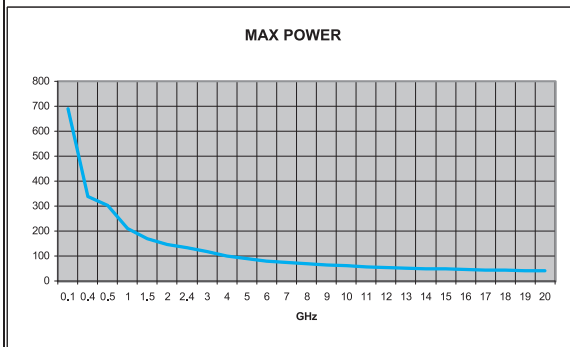
OUTER CONDUCTOR INTEGRITY: 30 POUNDS MINIMUM AXIAL PULL
MINIMUM BEND RADIUS (ONE TIME): 0.13 INCHES FIXED INSTALLATION
PREFERRED BEND RADIUS: 0.38 INCHES
TEMPERATURE RANGE: -65 / +200 DEGREES CELSIUS
WEIGHT MAXIMUM: 0.008 POUNDS PER FOOT

ELECTRICAL CHARACTERISTICS:

CENTER CONDUCTOR DC RESISTANCE 2.43 OHMS / 100 FEET NOMINAL
OUTER CONDUCTOR DC RESISTANCE 0.39 OHMS / 100 FEET NOMINAL
NOMINAL IMPEDANCE: 50 OHMS
NOMINAL CAPACITANCE: 28.7 pf / FT.
NOMINAL INDUCTANCE: 0.072 uh / FT
NOMINAL VELOCITY OF PROPAGATION: 70.7 %
NOMINAL DELAY: 1.44 nS / FT.
MAXIMUM OPERATING VOLTAGE: 1056 VRMS
MAXIMUM CW POWER RATING: 40 WATTS AT 20 GHz
MAXIMUM RETURN LOSS: -20 dB AT 20 GHz
MAXIMUM INSERTION LOSS: 109.2 dB / 100 FT AT 20 GHz
NOMINAL INSERTION LOSS: 103.0 dB / 100 FT AT 20 GHz
 To calculate maximum insertion loss at any frequency use the formula below:
 $19.86 \text{ times square root of freq.} + 1.021 \text{ times freq.} + 0 = \text{dB}/100'$
RELATIVE SHIELDING: -100 dB SINGLE SHIELDED

FEATURES:

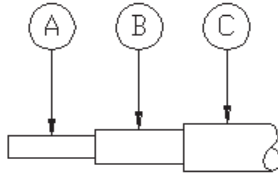
EASILY FORMS INTO DESIRED SHAPE AND MAINTAINS ELECTRICAL PERFORMANCE



Data subject to change

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TENSOLITE CABLE DATA SHEET



CABLE CODE:	678
CATEGORY:	SEMI-RIGID
DESCRIPTION:	M17/133-00006
IMPEDANCE:	50 OHMS
MAX. OD:	0.088 INCHES
MAX. OPERATING FREQ.:	26.5 GHz.
CUT OFF FREQ.:	62.0 GHz.
CLAMP CABLE GROUP:	N/A
SOLDER CABLE GROUP:	977
CRIMP CABLE GROUP:	977
MIL SPEC:	M17/133-00006
FLORIDA PART X REF.:	N/A

ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	SILVER PLATED COPPER WELD STEEL	0.020
B. DIELECTRIC:	PTFE	0.066
C. JACKET:	COPPER TUBE	0.086

MECHANICAL CHARACTERISTICS:

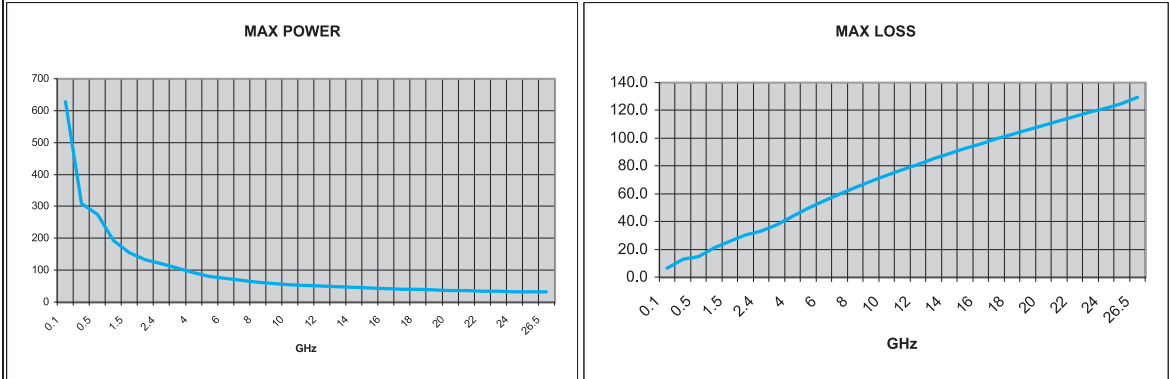
OUTER CONDUCTOR INTEGRITY:	30 POUNDS MINIMUM AXIAL PULL
MINIMUM BEND RADIUS (ONE TIME):	0.13 INCHES FIXED INSTALLATION
PREFERRED BEND RADIUS:	0.25 INCHES
TEMPERATURE RANGE:	-55 / +125 DEGREES CELSIUS
WEIGHT MAXIMUM:	0.017 POUNDS PER FOOT

ELECTRICAL CHARACTERISTICS:

CENTER CONDUCTOR DC RESISTANCE	2.43 OHMS / 100 FEET NOMINAL
OUTER CONDUCTOR DC RESISTANCE	0.24 OHMS / 100 FEET NOMINAL
NOMINAL IMPEDANCE:	50 OHMS
NOMINAL CAPACITANCE:	28.7 pf / FT.
NOMINAL INDUCTANCE:	0.072 uh / FT
NOMINAL VELOCITY OF PROPAGATION:	70.7 %
NOMINAL DELAY:	1.44 nS / FT.
MAXIMUM OPERATING VOLTAGE:	1056 VRMS
MAXIMUM CW POWER RATING:	31 WATTS AT 26.5 GHz
MAXIMUM RETURN LOSS:	-20 dB AT 26.5 GHz
MAXIMUM INSERTION LOSS:	129.2 dB / 100 FT AT 26.5 GHz
NOMINAL INSERTION LOSS:	123.1 dB / 100 FT AT 26.5 GHz

To calculate maximum insertion loss at any frequency use the formula below:
 $20.01 \text{ times square root of freq.} + 0.990 \text{ times freq.} + 0 = \text{dB}/100'$
 RELATIVE SHIELDING: -100 dB SINGLE SHIELDED

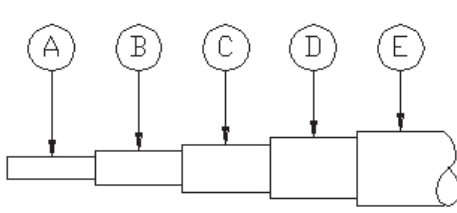
FEATURES:



Data subject to change

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TENSOLITE CABLE DATA SHEET

	CABLE CODE: 620 CATEGORY: SEMI-FLEX(R) PLUS DESCRIPTION: .086 RIGID TYPE IMPEDANCE: 50 OHMS MAX. OD: 0.120 INCHES MAX. OPERATING FREQ.: 26.5 GHz. CUT OFF FREQ.: 62.0 GHz. CLAMP CABLE GROUP: N/A SOLDER CABLE GROUP: 600, 977 CRIMP CABLE GROUP: N/A MIL SPEC: N/A FLORIDA PART X REF.: N/A
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ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	SILVER PLATED COPPER CLAD STEEL WIRE	0.020
B. DIELECTRIC:	SOLID PTFE	0.062
C. INNER BRAID:	COPPER / POLYESTER FOIL	0.072
D. OUTER BRAID:	TIN FILLED HIGH STRENGTH WIRE BRAID	0.087
E. JACKET:	GRAY TINT TRANSLUCENT POLYURETHANE	0.115

MECHANICAL CHARACTERISTICS:

OUTER CONDUCTOR INTEGRITY: 30 POUNDS MINIMUM AXIAL PULL

MINIMUM BEND RADIUS (ONE TIME): 0.13 INCHES FIXED INSTALLATION

PREFERRED BEND RADIUS: 0.38 INCHES

TEMPERATURE RANGE: -50 / +85 DEGREES CELSIUS

WEIGHT MAXIMUM: 0.015 POUNDS PER FOOT

ELECTRICAL CHARACTERISTICS:

CENTER CONDUCTOR DC RESISTANCE 2.43 OHMS / 100 FEET NOMINAL

OUTER CONDUCTOR DC RESISTANCE 0.29 OHMS / 100 FEET NOMINAL

NOMINAL IMPEDANCE: 50 OHMS

NOMINAL CAPACITANCE: 28.7 pf / FT.

NOMINAL INDUCTANCE: 0.072 uh / FT

NOMINAL VELOCITY OF PROPAGATION: 70.7 %

NOMINAL DELAY: 1.44 nS / FT.

MAXIMUM OPERATING VOLTAGE: 1000 VRMS

MAXIMUM CW POWER RATING: 12 WATTS AT 26.5 GHz

MAXIMUM RETURN LOSS: -22 dB AT 26.5 GHz

MAXIMUM INSERTION LOSS: 148.2 dB / 100 FT AT 26.5 GHz

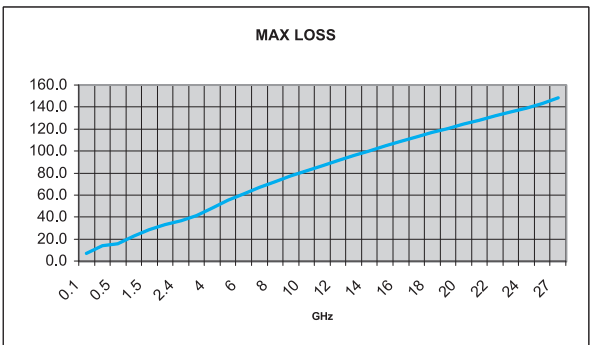
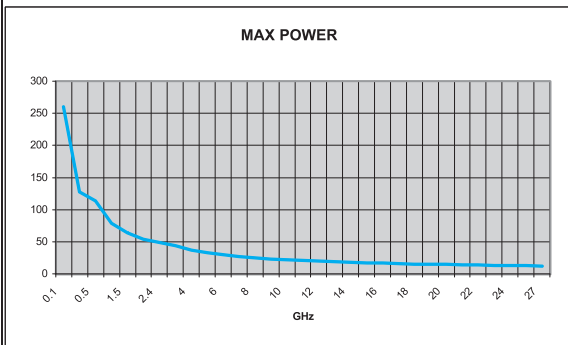
NOMINAL INSERTION LOSS: 139.8 dB / 100 FT AT 26.5 GHz

To calculate maximum insertion loss at any frequency use the formula below:

$$21.412 \text{ times square root of freq.} + 1.434 \text{ times freq.} + 0 = \text{dB}/100'$$

RELATIVE SHIELDING: -100 dB DOUBLE SHIELDED

FEATURES: SEMI-RIGID REPLACEMENT CABLE AVAILABLE ON TENSOLITE ASSEMBLIES ONLY. EASILY FORMS INTO DESIRED SHAPE AND MAINTAINS ELECTRICAL PERFORMANCE

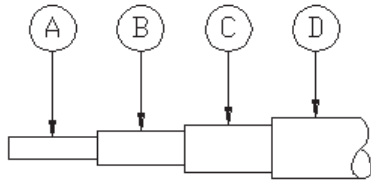


Data subject to change

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Semi-Rigid, Semi-Flex® and Q-Flex Cables

TENSOLITE CABLE DATA SHEET



CABLE CODE: 671
CATEGORY: SEMI-FLEX(R)
DESCRIPTION: .141 RIGID TYPE
IMPEDANCE: 75 OHMS
MAX. OD: 0.141 INCHES
MAX. OPERATING FREQ.: 3 GHZ.
CUT OFF FREQ.: 38.4 GHZ.
CLAMP CABLE GROUP: N/A
SOLDER CABLE GROUP: 671, 971
CRIMP CABLE GROUP: N/A
MIL SPEC: N/A
FLORIDA PART X REF.: N/A

ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	SILVER PLATED COPPER WIRE	0.020
B. DIELECTRIC:	SOLID PTFE	0.115
C. OUTER BRAID:	COPPER / POLYESTER FOIL	0.125
D. JACKET:	TIN FILLED HIGH STRENGTH WIRE BRAID	0.139

MECHANICAL CHARACTERISTICS:

OUTER CONDUCTOR INTEGRITY: 50 POUNDS MINIMUM AXIAL PULL
MINIMUM BEND RADIUS (ONE TIME): 0.19 INCHES FIXED INSTALLATION
PREFERRED BEND RADIUS: 0.50 INCHES
TEMPERATURE RANGE: -50 / +200 DEGREES CELSIUS
WEIGHT MAXIMUM: 0.030 POUNDS PER FOOT

ELECTRICAL CHARACTERISTICS:

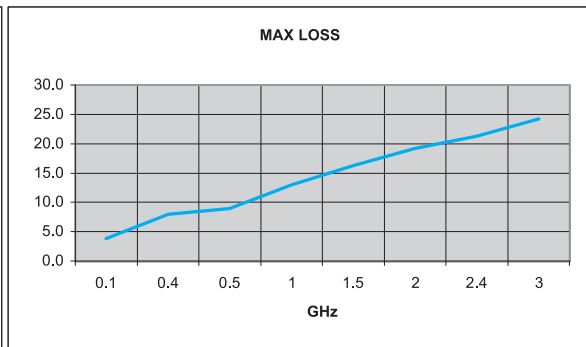
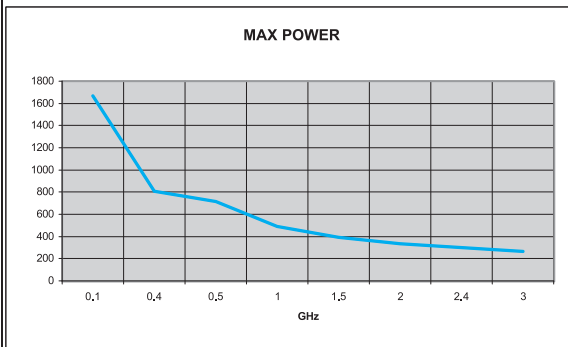
CENTER CONDUCTOR DC RESISTANCE 2.43 OHMS / 100 FEET NOMINAL
OUTER CONDUCTOR DC RESISTANCE 0.08 OHMS / 100 FEET NOMINAL
NOMINAL IMPEDANCE: 75 OHMS
NOMINAL CAPACITANCE: 19.2 pf / FT.
NOMINAL INDUCTANCE: 0.108 uh / FT
NOMINAL VELOCITY OF PROPAGATION: 70.7 %
NOMINAL DELAY: 1.44 nS / FT.
MAXIMUM OPERATING VOLTAGE: 2169 VRMS
MAXIMUM CW POWER RATING: 265 WATTS AT 3 GHZ
MAXIMUM RETURN LOSS: -22 dB AT 3 GHZ
MAXIMUM INSERTION LOSS: 24.2 dB / 100 FT AT 3 GHZ
NOMINAL INSERTION LOSS: 22.8 dB / 100 FT AT 3 GHZ

To calculate maximum insertion loss at any frequency use the formula below:

$$11.72 \text{ times square root of freq.} + 1.292 \text{ times freq.} + 0 = \text{dB}/100'$$

RELATIVE SHIELDING: -100 dB DOUBLE SHIELDED

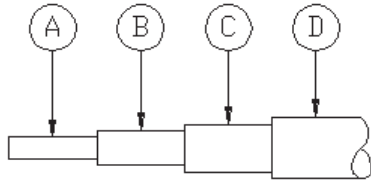
FEATURES: SEMI-RIGID REPLACEMENT CABLE
 EASILY FORMS INTO DESIRED SHAPE AND MAINTAINS ELECTRICAL PERFORMANCE



Data subject to change

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TENSOLITE CABLE DATA SHEET



CABLE CODE:	601
CATEGORY:	SEMI-FLEX(R)
DESCRIPTION:	.141 RIGID TYPE
IMPEDANCE:	50 OHMS
MAX. OD:	0.141 INCHES
MAX. OPERATING FREQ.:	26.5 GHz.
CUT OFF FREQ.:	34.4 GHz.
CLAMP CABLE GROUP:	N/A
SOLDER CABLE GROUP:	601, 976
CRIMP CABLE GROUP:	N/A
MIL SPEC:	N/A
FLORIDA PART X REF.:	N/A

ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	SILVER PLATED COPPER CLAD STEEL	0.036
B. DIELECTRIC:	SOLID PTFE	0.117
C. OUTER BRAID:	COPPER / POLYESTER FOIL	0.127
D. JACKET:	TIN FILLED HIGH STRENGTH WIRE BRAID	0.139

MECHANICAL CHARACTERISTICS:

OUTER CONDUCTOR INTEGRITY:	60 POUNDS MINIMUM AXIAL PULL
MINIMUM BEND RADIUS (ONE TIME):	0.19 INCHES FIXED INSTALLATION
PREFERRED BEND RADIUS:	0.50 INCHES
TEMPERATURE RANGE:	-50 / +200 DEGREES CELSIUS
WEIGHT MAXIMUM:	0.030 POUNDS PER FOOT

ELECTRICAL CHARACTERISTICS:

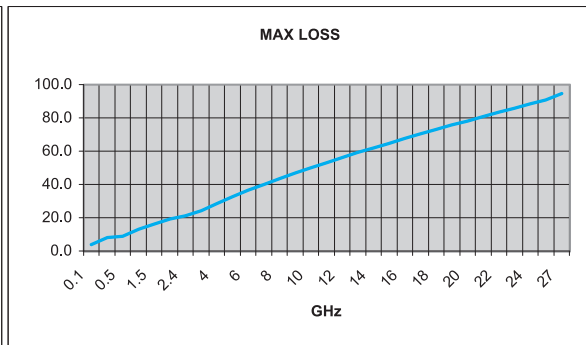
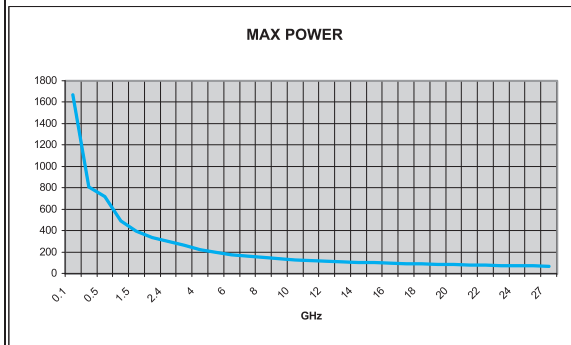
CENTER CONDUCTOR DC RESISTANCE	0.75 OHMS / 100 FEET NOMINAL
OUTER CONDUCTOR DC RESISTANCE	0.08 OHMS / 100 FEET NOMINAL
NOMINAL IMPEDANCE:	50 OHMS
NOMINAL CAPACITANCE:	28.7 pf / FT.
NOMINAL INDUCTANCE:	0.072 uh / FT
NOMINAL VELOCITY OF PROPAGATION:	70.7 %
NOMINAL DELAY:	1.44 nS / FT.
MAXIMUM OPERATING VOLTAGE:	2627 VRMS
MAXIMUM CW POWER RATING:	68 WATTS AT 26.5 GHz
MAXIMUM RETURN LOSS:	-22 dB AT 26.5 GHz
MAXIMUM INSERTION LOSS:	94.6 dB / 100 FT AT 26.5 GHz
NOMINAL INSERTION LOSS:	89.2 dB / 100 FT AT 26.5 GHz

To calculate maximum insertion loss at any frequency use the formula below:

$$11.719 \text{ times square root of freq.} + 1.292 \text{ times freq.} + 0 = \text{dB}/100'$$

RELATIVE SHIELDING: -100 dB DOUBLE SHIELDED

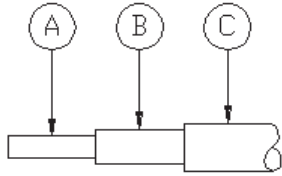
FEATURES: SEMI-RIGID REPLACEMENT CABLE AVAILABLE ONLY ON TENSOLITE ASSEMBLIES. EASILY FORMS INTO DESIRED SHAPE AND MAINTAINS ELECTRICAL PERFORMANCE



Data subject to change

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TENSOLITE CABLE DATA SHEET



CABLE CODE:	602
CATEGORY:	SEMI-RIGID
DESCRIPTION:	.141 LOW LOSS
IMPEDANCE:	50 OHMS
MAX. OD:	0.143 INCHES
MAX. OPERATING FREQ.:	26.5 GHz.
CUT OFF FREQ.:	37.1 GHz.
CLAMP CABLE GROUP:	N/A
SOLDER CABLE GROUP:	979
CRIMP CABLE GROUP:	N/A
MIL SPEC:	N/A
FLORIDA PART X REF.:	N/A

ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	SILVER PLATED COPPER WIRE	0.045
B. DIELECTRIC:	AIR SPACED PTFE	0.118
C. JACKET:	COPPER TUBE	0.141

MECHANICAL CHARACTERISTICS:

OUTER CONDUCTOR INTEGRITY:	60 POUNDS MINIMUM AXIAL PULL
MINIMUM BEND RADIUS (ONE TIME):	0.50 INCHES FIXED INSTALLATION
PREFERRED BEND RADIUS:	1.00 INCHES
TEMPERATURE RANGE:	-65 / +200 DEGREES CELSIUS
WEIGHT MAXIMUM:	0.015 POUNDS PER FOOT

ELECTRICAL CHARACTERISTICS:

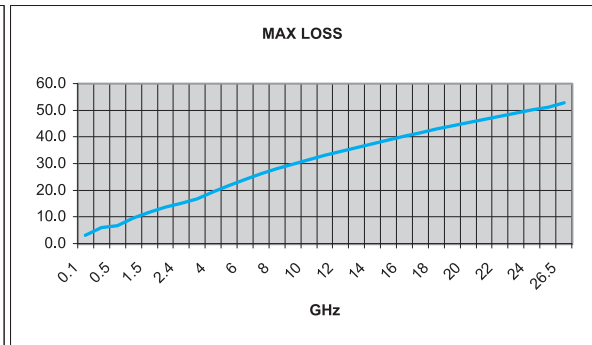
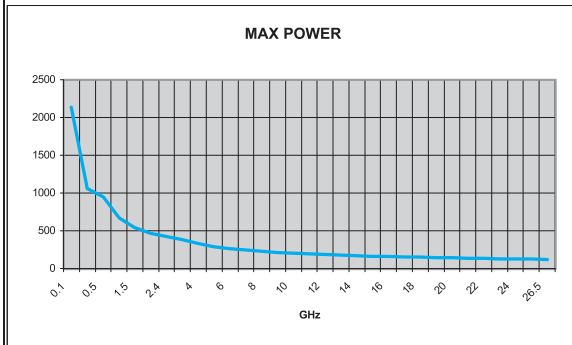
CENTER CONDUCTOR DC RESISTANCE	0.48 OHMS / 100 FEET NOMINAL
OUTER CONDUCTOR DC RESISTANCE	0.07 OHMS / 100 FEET NOMINAL
NOMINAL IMPEDANCE:	50 OHMS
NOMINAL CAPACITANCE:	24.5 pf / FT.
NOMINAL INDUCTANCE:	0.061 uh / FT
NOMINAL VELOCITY OF PROPAGATION:	83.0 %
NOMINAL DELAY:	1.22 nS / FT.
MAXIMUM OPERATING VOLTAGE:	1917 VRMS
MAXIMUM CW POWER RATING:	121 WATTS AT 26.5 GHz
MAXIMUM RETURN LOSS:	-23 dB AT 26.5 GHz
MAXIMUM INSERTION LOSS:	52.8 dB / 100 FT AT 26.5 GHz
NOMINAL INSERTION LOSS:	49.8 dB / 100 FT AT 26.5 GHz

To calculate maximum insertion loss at any frequency use the formula below:

$$\text{RELATIVE SHIELDING} = 9.445 \text{ times square root of freq.} + 0.158 \text{ times freq.} + 0 = \text{dB}/100'$$

-100 dB SINGLE SHIELDED

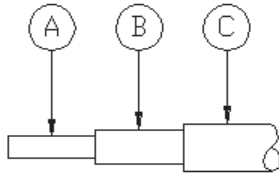
FEATURES: 35% LOWER LOSS THAN SOLID DIELECTRIC SEMI-RIGID CABLE
 POWER HANDLING TWICE THAT OF SOLID DIELECTRIC SEMI-RIGID CABLE.



Data subject to change

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TENSOLITE CABLE DATA SHEET



CABLE CODE:	618
CATEGORY:	SEMI-FLEX(R) II
DESCRIPTION:	.141 RIGID TYPE
IMPEDANCE:	50 OHMS
MAX. OD:	0.144 INCHES
MAX. OPERATING FREQ.:	20 GHz.
CUT OFF FREQ.:	34.4 GHz.
CLAMP CABLE GROUP:	N/A
SOLDER CABLE GROUP:	976
CRIMP CABLE GROUP:	976
MIL SPEC:	M17/130-00009
FLORIDA PART X REF.:	N/A

ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	SILVER PLATED COPPER WELD STEEL	0.036
B. DIELECTRIC:	PTFE	0.117
C. JACKET:	TIN COATED ASTM B-211 ALUMINUM	0.141

MECHANICAL CHARACTERISTICS:

OUTER CONDUCTOR INTEGRITY:	60 POUNDS MINIMUM AXIAL PULL
MINIMUM BEND RADIUS (ONE TIME):	0.15 INCHES FIXED INSTALLATION
PREFERRED BEND RADIUS:	0.40 INCHES
TEMPERATURE RANGE:	-65 / +200 DEGREES CELSIUS
WEIGHT MAXIMUM:	0.017 POUNDS PER FOOT

ELECTRICAL CHARACTERISTICS:

CENTER CONDUCTOR DC RESISTANCE	0.75 OHMS / 100 FEET NOMINAL
OUTER CONDUCTOR DC RESISTANCE	0.12 OHMS / 100 FEET NOMINAL
NOMINAL IMPEDANCE:	50 OHMS
NOMINAL CAPACITANCE:	28.7 pf / FT.
NOMINAL INDUCTANCE:	0.072 uh / FT
NOMINAL VELOCITY OF PROPAGATION:	70.7 %
NOMINAL DELAY:	1.44 nS / FT.
MAXIMUM OPERATING VOLTAGE:	1876 VRMS
MAXIMUM CW POWER RATING:	91 WATTS AT 20 GHz
MAXIMUM RETURN LOSS:	-20 dB AT 20 GHz
MAXIMUM INSERTION LOSS:	70.4 dB / 100 FT AT 20 GHz
NOMINAL INSERTION LOSS:	66.4 dB / 100 FT AT 20 GHz

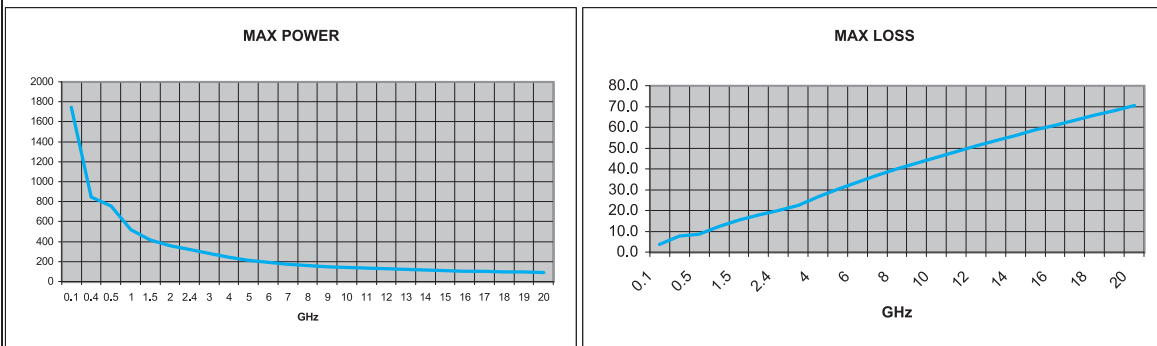
To calculate maximum insertion loss at any frequency use the formula below:

$$11.297 \text{ times square root of freq. + } 0.992 \text{ times freq. + } 0 = \text{dB}/100'$$

RELATIVE SHIELDING: -100 dB SINGLE SHIELDED

FEATURES:

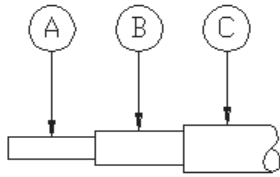
EASILY FORMS INTO DESIRED SHAPE AND MAINTAINS ELECTRICAL PERFORMANCE



Data subject to change

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TENSOLITE CABLE DATA SHEET



CABLE CODE:	676
CATEGORY:	SEMI-RIGID
DESCRIPTION:	M17/130-00004
IMPEDANCE:	50 OHMS
MAX. OD:	0.143 INCHES
MAX. OPERATING FREQ.:	26.5 GHz.
CUT OFF FREQ.:	34.4 GHz.
CLAMP CABLE GROUP:	N/A
SOLDER CABLE GROUP:	976
CRIMP CABLE GROUP:	976
MIL SPEC:	M17/130-00004
FLORIDA PART X REF.:	N/A

ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	SILVER PLATED COPPER WELD STEEL	0.036
B. DIELECTRIC:	PTFE	0.116
C. JACKET:	COPPER TUBE	0.141

MECHANICAL CHARACTERISTICS:

OUTER CONDUCTOR INTEGRITY:	60 POUNDS MINIMUM AXIAL PULL
MINIMUM BEND RADIUS (ONE TIME):	0.13 INCHES FIXED INSTALLATION
PREFERRED BEND RADIUS:	0.25 INCHES
TEMPERATURE RANGE:	-55 / +125 DEGREES CELSIUS
WEIGHT MAXIMUM:	0.037 POUNDS PER FOOT

ELECTRICAL CHARACTERISTICS:

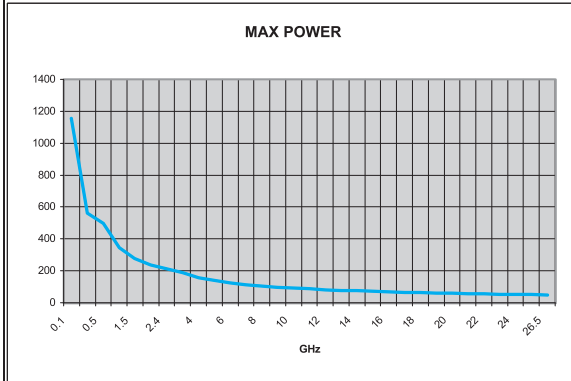
CENTER CONDUCTOR DC RESISTANCE	0.75 OHMS / 100 FEET NOMINAL
OUTER CONDUCTOR DC RESISTANCE	0.08 OHMS / 100 FEET NOMINAL
NOMINAL IMPEDANCE:	50 OHMS
NOMINAL CAPACITANCE:	28.7 pf / FT.
NOMINAL INDUCTANCE:	0.072 uh / FT
NOMINAL VELOCITY OF PROPAGATION:	70.7 %
NOMINAL DELAY:	1.44 nS / FT.
MAXIMUM OPERATING VOLTAGE:	1863 VRMS
MAXIMUM CW POWER RATING:	49 WATTS AT 26.5 GHz
MAXIMUM RETURN LOSS:	-20 dB AT 26.5 GHz
MAXIMUM INSERTION LOSS:	81.8 dB / 100 FT AT 26.5 GHz
NOMINAL INSERTION LOSS:	77.9 dB / 100 FT AT 26.5 GHz

To calculate maximum insertion loss at any frequency use the formula below:

10.716 times square root of freq. +	1.003 times freq. +	0 = dB/100'
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RELATIVE SHIELDING: -100 dB SINGLE SHIELDED

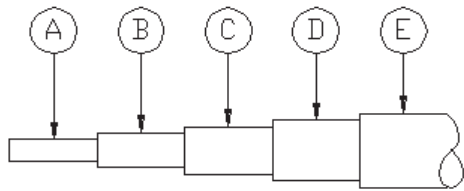
FEATURES:



Data subject to change

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TENSOLITE CABLE DATA SHEET



CABLE CODE: 621
CATEGORY: SEMI-FLEX(R) PLUS
DESCRIPTION: .141 RIGID TYPE
IMPEDANCE: 50 OHMS
MAX. OD: 0.173 INCHES
MAX. OPERATING FREQ.: 26.5 GHz.
CUT OFF FREQ.: 34.4 GHz.
CLAMP CABLE GROUP: N/A
SOLDER CABLE GROUP: 601, 976
CRIMP CABLE GROUP: N/A
MIL SPEC: N/A
FLORIDA PART X REF.: N/A

ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	SILVER PLATED COPPER WELD STEEL	0.036
B. DIELECTRIC:	SOLID PTFE	0.117
C. INNER BRAID:	COPPER / POLYESTER FOIL	0.127
D. OUTER BRAID:	TIN FILLED HIGH STRENGTH WIRE BRAID	0.141
E. JACKET:	GRAY TINT TRANSLUCENT POLYURETHANE	0.168

MECHANICAL CHARACTERISTICS:

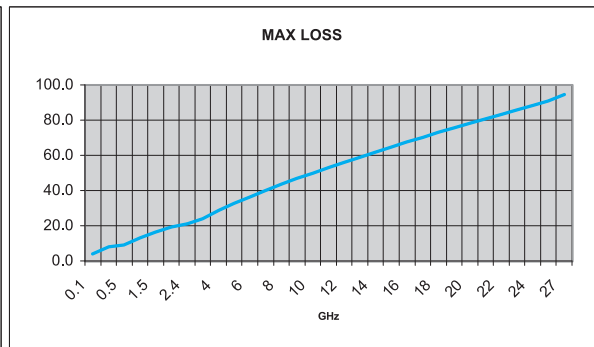
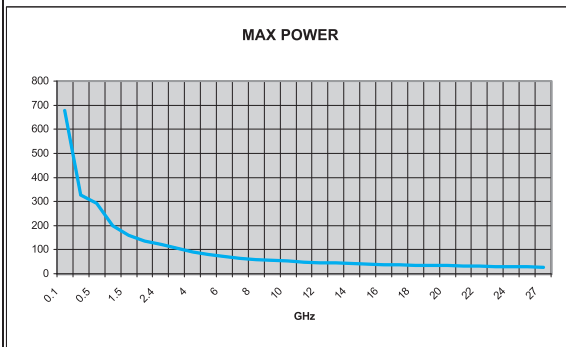
OUTER CONDUCTOR INTEGRITY: 60 POUNDS MINIMUM AXIAL PULL
MINIMUM BEND RADIUS (ONE TIME): 0.19 INCHES FIXED INSTALLATION
PREFERRED BEND RADIUS: 0.50 INCHES
TEMPERATURE RANGE: -50 / +85 DEGREES CELSIUS
WEIGHT MAXIMUM: 0.046 POUNDS PER FOOT

ELECTRICAL CHARACTERISTICS:

CENTER CONDUCTOR DC RESISTANCE 0.75 OHMS / 100 FEET NOMINAL
OUTER CONDUCTOR DC RESISTANCE 0.08 OHMS / 100 FEET NOMINAL
NOMINAL IMPEDANCE: 50 OHMS
NOMINAL CAPACITANCE: 28.7 pf / FT.
NOMINAL INDUCTANCE: 0.072 uh / FT
NOMINAL VELOCITY OF PROPAGATION: 70.7 %
NOMINAL DELAY: 1.44 nS / FT.
MAXIMUM OPERATING VOLTAGE: 1876 VRMS
MAXIMUM CW POWER RATING: 27 WATTS AT 26.5 GHz
MAXIMUM RETURN LOSS: -22 dB AT 26.5 GHz
MAXIMUM INSERTION LOSS: 94.6 dB / 100 FT AT 26.5 GHz
NOMINAL INSERTION LOSS: 89.2 dB / 100 FT AT 26.5 GHz

To calculate maximum insertion loss at any frequency use the formula below:
 $11.719 \text{ times square root of freq.} + 1.292 \text{ times freq.} + 0 = \text{dB}/100'$
RELATIVE SHIELDING: -100 dB DOUBLE SHIELDED

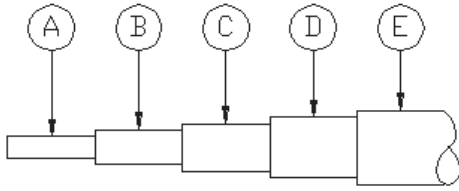
FEATURES: SEMI-RIGID REPLACEMENT CABLE AVAILABLE ON TENSOLITE ASSEMBLIES ONLY. EASILY FORMS INTO DESIRED SHAPE AND MAINTAINS ELECTRICAL PERFORMANCE



Data subject to change

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TENSOLITE CABLE DATA SHEET



CABLE CODE: 650
CATEGORY: SEMI-FLEX(R) HIGH TEMP
DESCRIPTION: .086 RIGID TYPE
IMPEDANCE: 50 OHMS
MAX. OD: 0.115 INCHES
MAX. OPERATING FREQ.: 18 GHZ.
CUT OFF FREQ.: 62.0 GHZ.
CLAMP CABLE GROUP: N/A
SOLDER CABLE GROUP: 600, 977
CRIMP CABLE GROUP: N/A
MIL SPEC: N/A
FLORIDA PART X REF.: N/A

ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	SILVER PLATED COPPER WELD STEEL WIRE	0.020
B. DIELECTRIC:	SOLID PTFE	0.062
C. INNER BRAID:	COPPER / POLYESTER FOIL	0.072
D. OUTER BRAID:	TIN FILLED HIGH STRENGTH WIRE BRAID	0.087
E. JACKET:	FEP (Fluorinated Ethylene Propylene) LIGHT BLUE	0.110

MECHANICAL CHARACTERISTICS:

OUTER CONDUCTOR INTEGRITY: 30 POUNDS MINIMUM AXIAL PULL
MINIMUM BEND RADIUS (ONE TIME): 0.13 INCHES FIXED INSTALLATION
PREFERRED BEND RADIUS: 0.38 INCHES
TEMPERATURE RANGE: -50 / +200 DEGREES CELSIUS
WEIGHT MAXIMUM: 0.015 POUNDS PER FOOT

ELECTRICAL CHARACTERISTICS:

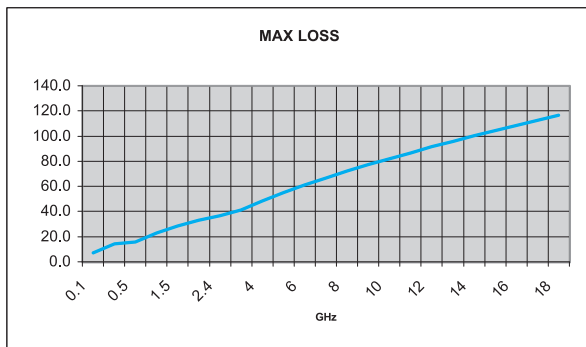
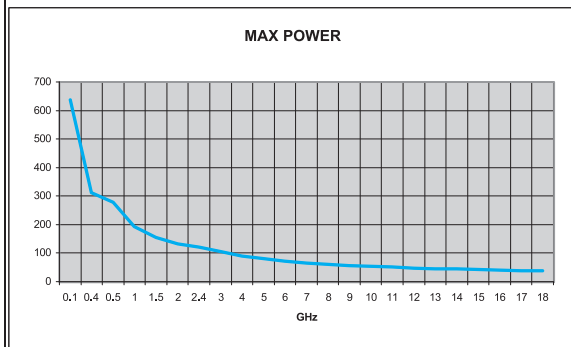
CENTER CONDUCTOR DC RESISTANCE 2.43 OHMS / 100 FEET NOMINAL
OUTER CONDUCTOR DC RESISTANCE 0.29 OHMS / 100 FEET NOMINAL
NOMINAL IMPEDANCE: 50 OHMS
NOMINAL CAPACITANCE: 28.7 pf / FT.
NOMINAL INDUCTANCE: 0.072 uh / FT
NOMINAL VELOCITY OF PROPAGATION: 70.7 %
NOMINAL DELAY: 1.44 nS / FT.
MAXIMUM OPERATING VOLTAGE: 1000 VRMS
MAXIMUM CW POWER RATING: 38 WATTS AT 18 GHZ
MAXIMUM RETURN LOSS: -22 dB AT 18 GHZ
MAXIMUM INSERTION LOSS: 116.7 dB / 100 FT AT 18 GHZ
NOMINAL INSERTION LOSS: 110.1 dB / 100 FT AT 18 GHZ

To calculate maximum insertion loss at any frequency use the formula below:

$$21.412 \text{ times square root of freq.} + 1.434 \text{ times freq.} + 0 = \text{dB}/100'$$

RELATIVE SHIELDING: -100 dB DOUBLE SHIELDED

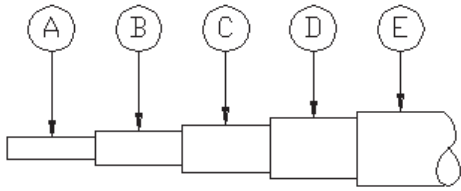
FEATURES: SEMI-RIGID REPLACEMENT CABLE
 EASILY FORMS INTO DESIRED SHAPE AND MAINTAINS ELECTRICAL PERFORMANCE



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TENSOLITE CABLE DATA SHEET



CABLE CODE: 461
CATEGORY: .086 Q-FLEX(R)
DESCRIPTION: RIGID REPLACEMENT
IMPEDANCE: 50 OHMS
MAX. OD: 0.109 INCHES
MAX. OPERATING FREQ.: 18 GHz.
CUT OFF FREQ.: 62.0 GHz.
CLAMP CABLE GROUP: N/A
SOLDER CABLE GROUP: 977, 461
CRIMP CABLE GROUP: N/A
MIL SPEC: N/A
FLORIDA PART X REF.: LLF-1087

ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	SILVER PLATED COPPER CLAD STEEL	0.020
B. DIELECTRIC:	SOLID PTFE	0.065
C. INNER BRAID:	SILVER PLATED COPPER SPIRAL STRIP	0.073
D. OUTER BRAID:	SILVER PLATED COPPER WIRE BRAIDS	0.087
E. JACKET:	SOLID FEP	0.105

MECHANICAL CHARACTERISTICS:

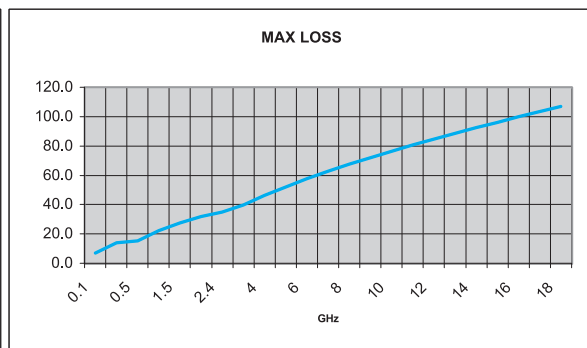
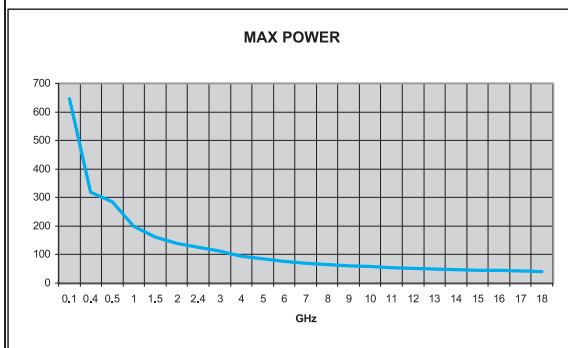
OUTER CONDUCTOR INTEGRITY: 30 POUNDS MINIMUM AXIAL PULL
MINIMUM BEND RADIUS (ONE TIME): 0.63 INCHES FIXED INSTALLATION
PREFERRED BEND RADIUS: 2.10 INCHES
TEMPERATURE RANGE: -55 / +200 DEGREES CELSIUS
WEIGHT MAXIMUM: 0.015 POUNDS PER FOOT

ELECTRICAL CHARACTERISTICS:

CENTER CONDUCTOR DC RESISTANCE 2.43 OHMS / 100 FEET NOMINAL
OUTER CONDUCTOR DC RESISTANCE 4.03 OHMS / 100 FEET NOMINAL
NOMINAL IMPEDANCE: 50 OHMS
NOMINAL CAPACITANCE: 28.7 pf / FT.
NOMINAL INDUCTANCE: 0.072 uh / FT
NOMINAL VELOCITY OF PROPAGATION: 70.7 %
NOMINAL DELAY: 1.44 nS / FT.
MAXIMUM OPERATING VOLTAGE: 1042 VRMS
MAXIMUM CW POWER RATING: 41 WATTS AT 18 GHz
MAXIMUM RETURN LOSS: -20 dB AT 18 GHz
MAXIMUM INSERTION LOSS: 106.8 dB / 100 FT AT 18 GHz
NOMINAL INSERTION LOSS: 99.8 dB / 100 FT AT 18 GHz
 To calculate maximum insertion loss at any frequency use the formula below:
 $21.204 \text{ times square root of freq.} + 0.935 \text{ times freq.} + 0 = \text{dB}/100'$
RELATIVE SHIELDING: -90 dB DOUBLE SHIELDED

FEATURES: SEMI-RIGID REPLACEMENT CABLE

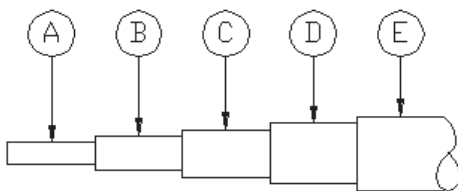
EASILY FORMS INTO DESIRED SHAPE AND MAINTAINS ELECTRICAL PERFORMANCE



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TENSOLITE CABLE DATA SHEET

	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">CABLE CODE:</td> <td style="text-align: right;">794</td> </tr> <tr> <td>CATEGORY:</td> <td style="text-align: right;">.086 Q-FLEX(R)</td> </tr> <tr> <td>DESCRIPTION:</td> <td style="text-align: right;">RIGID REPLACEMENT</td> </tr> <tr> <td>IMPEDANCE:</td> <td style="text-align: right;">50 OHMS</td> </tr> <tr> <td>MAX. OD:</td> <td style="text-align: right;">0.109 INCHES</td> </tr> <tr> <td>MAX. OPERATING FREQ.:</td> <td style="text-align: right;">40 GHz.</td> </tr> <tr> <td>CUT OFF FREQ.:</td> <td style="text-align: right;">62.0 GHz.</td> </tr> <tr> <td>CLAMP CABLE GROUP:</td> <td style="text-align: right;">N/A</td> </tr> <tr> <td>SOLDER CABLE GROUP:</td> <td style="text-align: right;">977, 461</td> </tr> <tr> <td>CRIMP CABLE GROUP:</td> <td style="text-align: right;">N/A</td> </tr> <tr> <td>MIL SPEC:</td> <td style="text-align: right;">N/A</td> </tr> <tr> <td>FLORIDA PART X REF.:</td> <td style="text-align: right;">HFF-1087</td> </tr> </table>	CABLE CODE:	794	CATEGORY:	.086 Q-FLEX(R)	DESCRIPTION:	RIGID REPLACEMENT	IMPEDANCE:	50 OHMS	MAX. OD:	0.109 INCHES	MAX. OPERATING FREQ.:	40 GHz.	CUT OFF FREQ.:	62.0 GHz.	CLAMP CABLE GROUP:	N/A	SOLDER CABLE GROUP:	977, 461	CRIMP CABLE GROUP:	N/A	MIL SPEC:	N/A	FLORIDA PART X REF.:	HFF-1087
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ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	SILVER PLATED COPPER CLAD STEEL	0.020
B. DIELECTRIC:	SOLID PTFE	0.065
C. INNER BRAID:	SILVER PLATED COPPER SPIRAL STRIP	0.073
D. OUTER BRAID:	SILVER PLATED COPPER WIRE BRAIDS	0.087
E. JACKET:	SOLID FEP	0.105

MECHANICAL CHARACTERISTICS:

OUTER CONDUCTOR INTEGRITY:	30 POUNDS MINIMUM AXIAL PULL
MINIMUM BEND RADIUS (ONE TIME):	0.63 INCHES FIXED INSTALLATION
PREFERRED BEND RADIUS:	2.10 INCHES
TEMPERATURE RANGE:	-55 / +200 DEGREES CELSIUS
WEIGHT MAXIMUM:	0.015 POUNDS PER FOOT

ELECTRICAL CHARACTERISTICS:

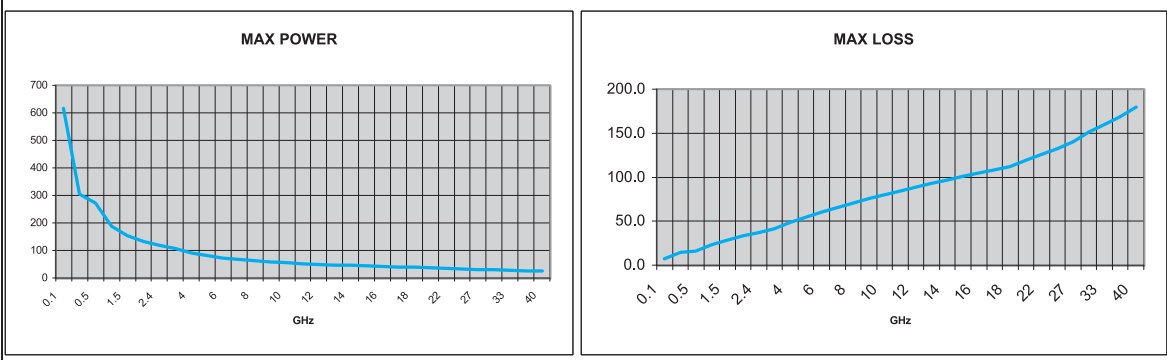
CENTER CONDUCTOR DC RESISTANCE	2.43 OHMS / 100 FEET NOMINAL
OUTER CONDUCTOR DC RESISTANCE	4.03 OHMS / 100 FEET NOMINAL
NOMINAL IMPEDANCE:	50 OHMS
NOMINAL CAPACITANCE:	28.7 pf / FT.
NOMINAL INDUCTANCE:	0.072 uh / FT
NOMINAL VELOCITY OF PROPAGATION:	70.7 %
NOMINAL DELAY:	1.44 nS / FT.
MAXIMUM OPERATING VOLTAGE:	1042 VRMS
MAXIMUM CW POWER RATING:	24 WATTS AT 40 GHz
MAXIMUM RETURN LOSS:	-20 dB AT 40 GHz
MAXIMUM INSERTION LOSS:	179.7 dB / 100 FT AT 40 GHz
NOMINAL INSERTION LOSS:	168.0 dB / 100 FT AT 40 GHz

To calculate maximum insertion loss at any frequency use the formula below:

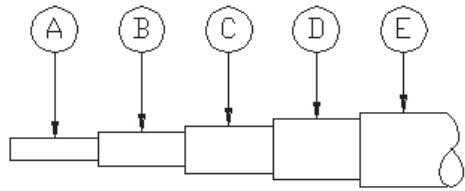
$$22.25 \text{ times square root of freq.} + 0.975 \text{ times freq.} + 0 = \text{dB}/100'$$

RELATIVE SHIELDING: -90 dB DOUBLE SHIELDED

FEATURES: SEMI-RIGID REPLACEMENT CABLE
 EASILY FORMS INTO DESIRED SHAPE AND MAINTAINS ELECTRICAL PERFORMANCE



TENSOLITE CABLE DATA SHEET



CABLE CODE: 463
CATEGORY: .141 Q-FLEX(R)
DESCRIPTION: RIGID REPLACEMENT
IMPEDANCE: 50 OHMS
MAX. OD: 0.168 INCHES
MAX. OPERATING FREQ.: 18 GHz.
CUT OFF FREQ.: 34.4 GHz.
CLAMP CABLE GROUP: N/A
SOLDER CABLE GROUP: 463, 976
CRIMP CABLE GROUP: N/A
MIL SPEC: N/A
FLORIDA PART X REF.: LLF-1141

ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	SILVER PLATED COPPER WELD STEEL WIRE	0.036
B. DIELECTRIC:	SOLID PTFE	0.117
C. INNER BRAID:	SILVER PLATED COPPER SPIRAL STRIP	0.128
D. OUTER BRAID:	SILVER PLATED COPPER WIRE BRAIDS	0.141
E. JACKET:	SOLID FEP	0.163

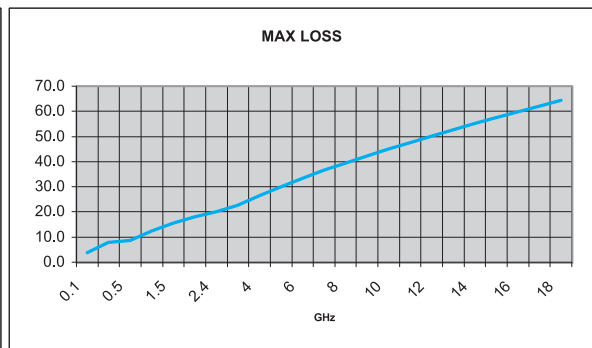
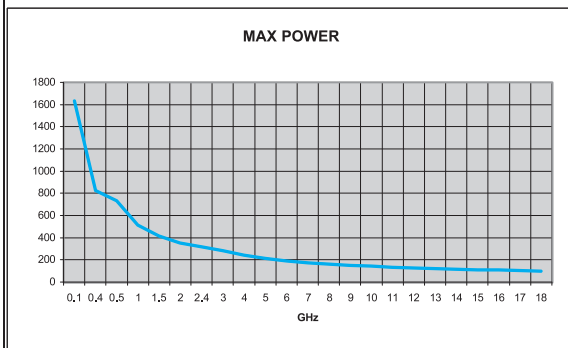
MECHANICAL CHARACTERISTICS:

OUTER CONDUCTOR INTEGRITY: 60 POUNDS MINIMUM AXIAL PULL
MINIMUM BEND RADIUS (ONE TIME): 0.98 INCHES FIXED INSTALLATION
PREFERRED BEND RADIUS: 3.26 INCHES
TEMPERATURE RANGE: -55 / +200 DEGREES CELSIUS
WEIGHT MAXIMUM: 0.033 POUNDS PER FOOT

ELECTRICAL CHARACTERISTICS:

CENTER CONDUCTOR DC RESISTANCE 0.75 OHMS / 100 FEET NOMINAL
OUTER CONDUCTOR DC RESISTANCE 2.07 OHMS / 100 FEET NOMINAL
NOMINAL IMPEDANCE: 50 OHMS
NOMINAL CAPACITANCE: 28.7 pf / FT.
NOMINAL INDUCTANCE: 0.072 uh / FT
NOMINAL VELOCITY OF PROPAGATION: 70.7 %
NOMINAL DELAY: 1.44 nS / FT.
MAXIMUM OPERATING VOLTAGE: 1876 VRMS
MAXIMUM CW POWER RATING: 99 WATTS AT 18 GHz
MAXIMUM RETURN LOSS: -20 dB AT 18 GHz
MAXIMUM INSERTION LOSS: 64.4 dB / 100 FT AT 18 GHz
NOMINAL INSERTION LOSS: 60.8 dB / 100 FT AT 18 GHz
 To calculate maximum insertion loss at any frequency use the formula below:
 $11.4 \text{ times square root of freq.} + 0.880 \text{ times freq.} + 0.22 = \text{dB}/100'$
RELATIVE SHIELDING: -90 dB DOUBLE SHIELDED

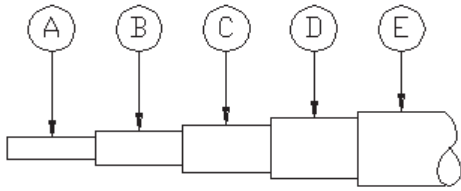
FEATURES: SEMI-RIGID REPLACEMENT CABLE.
 EASILY FORMS INTO DESIRED SHAPE AND MAINTAINS ELECTRICAL PERFORMANCE.



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TENSOLITE CABLE DATA SHEET



CABLE CODE:	465
CATEGORY:	.250 Q-FLEX(R)
DESCRIPTION:	RIGID REPLACEMENT
IMPEDANCE:	50 OHMS
MAX. OD:	0.275 INCHES
MAX. OPERATING FREQ.:	18 GHz.
CUT OFF FREQ.:	19.5 GHz.
CLAMP CABLE GROUP:	N/A
SOLDER CABLE GROUP:	465, 975
CRIMP CABLE GROUP:	N/A
MIL SPEC:	N/A
FLORIDA PART X REF.:	LLF-1250

ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	SILVER PLATED COPPER WIRE	0.064
B. DIELECTRIC:	SOLID PTFE	0.209
C. INNER BRAID:	SILVER PLATED COPPER SPIRAL STRIP	0.217
D. OUTER BRAID:	SILVER PLATED COPPER WIRE	0.246
E. JACKET:	SOLID FEP	0.270

MECHANICAL CHARACTERISTICS:

OUTER CONDUCTOR INTEGRITY:	80 POUNDS MINIMUM AXIAL PULL
MINIMUM BEND RADIUS (ONE TIME):	1.62 INCHES FIXED INSTALLATION
PREFERRED BEND RADIUS:	5.40 INCHES
TEMPERATURE RANGE:	-50 / +200 DEGREES CELSIUS
WEIGHT MAXIMUM:	0.097 POUNDS PER FOOT

ELECTRICAL CHARACTERISTICS:

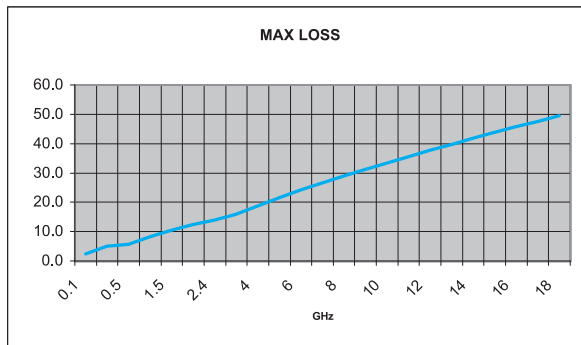
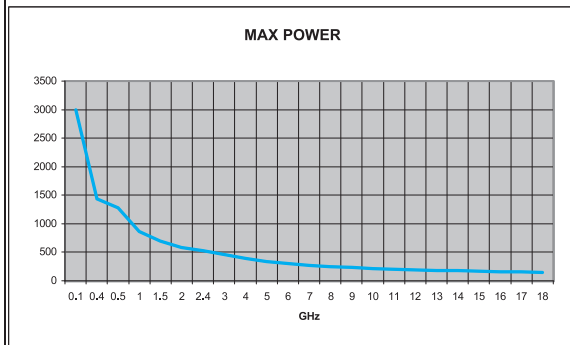
CENTER CONDUCTOR DC RESISTANCE	0.24 OHMS / 100 FEET NOMINAL
OUTER CONDUCTOR DC RESISTANCE	2.07 OHMS / 100 FEET NOMINAL
NOMINAL IMPEDANCE:	50 OHMS
NOMINAL CAPACITANCE:	28.7 pf / FT.
NOMINAL INDUCTANCE:	0.072 uh / FT
NOMINAL VELOCITY OF PROPAGATION:	70.7 %
NOMINAL DELAY:	1.44 nS / FT.
MAXIMUM OPERATING VOLTAGE:	3347 VRMS
MAXIMUM CW POWER RATING:	147 WATTS AT 18 GHz
MAXIMUM RETURN LOSS:	-20 dB AT 18 GHz
MAXIMUM INSERTION LOSS:	49.5 dB / 100 FT AT 18 GHz
NOMINAL INSERTION LOSS:	45.9 dB / 100 FT AT 18 GHz

To calculate maximum insertion loss at any frequency use the formula below:

7.39 times square root of freq. +	1.010 times freq. +	0 = dB/100'
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RELATIVE SHIELDING: -90 dB DOUBLE SHIELDED

FEATURES: SEMI-RIGID REPLACEMENT CABLE
EASILY FORMS INTO DESIRED SHAPE AND MAINTAINS ELECTRICAL PERFORMANCE

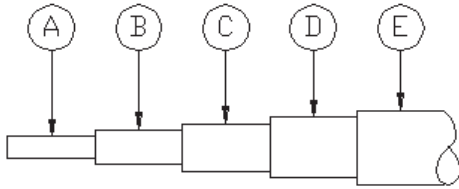


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Semi-Rigid, Semi-Flex® and Q-Flex Cables

TENSOLITE CABLE DATA SHEET



CABLE CODE:	561
CATEGORY:	.086 Q-FLEX(R) PLUS
DESCRIPTION:	RIGID REPLACEMENT
IMPEDANCE:	50 OHMS
MAX. OD:	0.119 INCHES
MAX. OPERATING FREQ.:	18 GHz.
CUT OFF FREQ.:	63.0 GHz.
CLAMP CABLE GROUP:	N/A
SOLDER CABLE GROUP:	461, 561, 977
CRIMP CABLE GROUP:	N/A
MIL SPEC:	N/A
FLORIDA PART X REF.:	561

ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	STRANDED SILVER PLATED COPPER CLAD STEEL	0.021
B. DIELECTRIC:	SOLID PTFE	0.063
C. INNER BRAID:	HELICAL WRAP SILVER PLATED COPPER STRIP	0.071
D. OUTER BRAID:	SILVER PLATED COPPER WIRE	0.085
E. JACKET:	SOLID CLEAR POLYURETHANE	0.115

MECHANICAL CHARACTERISTICS:

OUTER CONDUCTOR INTEGRITY:	30 POUNDS MINIMUM AXIAL PULL
MINIMUM BEND RADIUS (ONE TIME):	0.69 INCHES FIXED INSTALLATION
PREFERRED BEND RADIUS:	2.30 INCHES
TEMPERATURE RANGE:	-50 / +85 DEGREES CELSIUS
WEIGHT MAXIMUM:	0.014 POUNDS PER FOOT

ELECTRICAL CHARACTERISTICS:

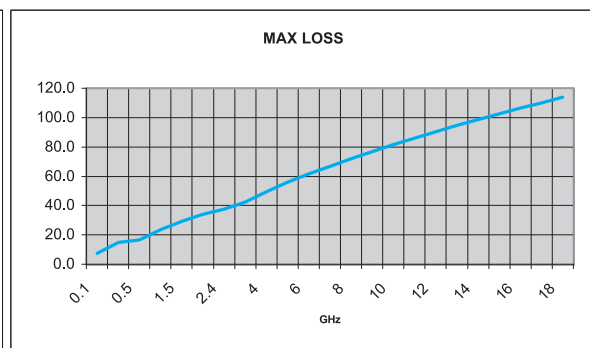
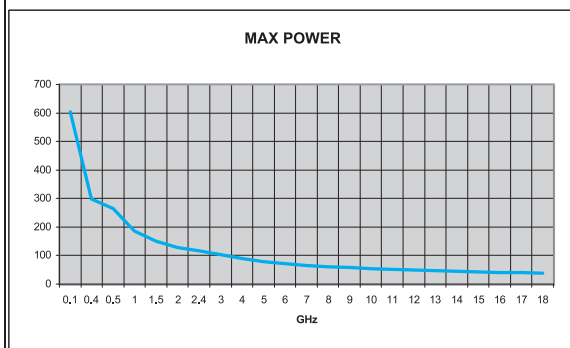
CENTER CONDUCTOR DC RESISTANCE	2.27 OHMS / 100 FEET NOMINAL
OUTER CONDUCTOR DC RESISTANCE	6.30 OHMS / 100 FEET NOMINAL
NOMINAL IMPEDANCE:	50 OHMS
NOMINAL CAPACITANCE:	28.7 pf / FT.
NOMINAL INDUCTANCE:	0.072 uh / FT
NOMINAL VELOCITY OF PROPAGATION:	70.7 %
NOMINAL DELAY:	1.44 nS / FT.
MAXIMUM OPERATING VOLTAGE:	1491 VRMS
MAXIMUM CW POWER RATING:	39 WATTS AT 18 GHz
MAXIMUM RETURN LOSS:	-22 dB AT 18 GHz
MAXIMUM INSERTION LOSS:	113.8 dB / 100 FT AT 18 GHz
NOMINAL INSERTION LOSS:	105.3 dB / 100 FT AT 18 GHz

To calculate maximum insertion loss at any frequency use the formula below:
 22.788 times square root of freq. + 0.950 times freq. + -0.02 = dB/100'

RELATIVE SHIELDING:	-90 dB	DOUBLE SHIELDED
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FEATURES: SEMI-RIGID REPLACEMENT CABLE

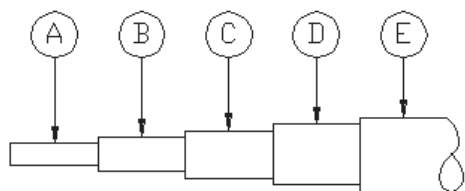
EASILY FORMS INTO DESIRED SHAPE AND MAINTAINS ELECTRICAL PERFORMANCE



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TENSOLITE CABLE DATA SHEET



CABLE CODE: 563
CATEGORY: .141 Q-FLEX(R) PLUS
DESCRIPTION: RIGID REPLACEMENT
IMPEDANCE: 50 OHMS
MAX. OD: 0.185 INCHES
MAX. OPERATING FREQ.: 18 GHz.
CUT OFF FREQ.: 34.7 GHz.
CLAMP CABLE GROUP: N/A
SOLDER CABLE GROUP: 463, 563, 976
CRIMP CABLE GROUP: N/A
MIL SPEC: N/A
FLORIDA PART X REF.: 563

ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	STRANDED SILVER PLATED COPPER WIRE	0.038
B. DIELECTRIC:	SOLID PTFE	0.116
C. INNER BRAID:	HELICAL WRAP SILVER PLATED COPPER STRIP	0.126
D. OUTER BRAID:	SILVER PLATED COPPER WIRE	0.140
E. JACKET:	SOLID CLEAR POLYURETHANE	0.180

MECHANICAL CHARACTERISTICS:

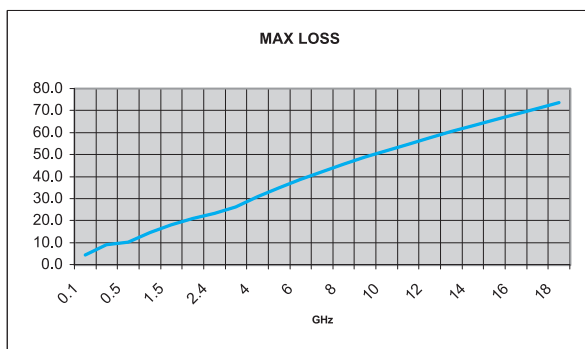
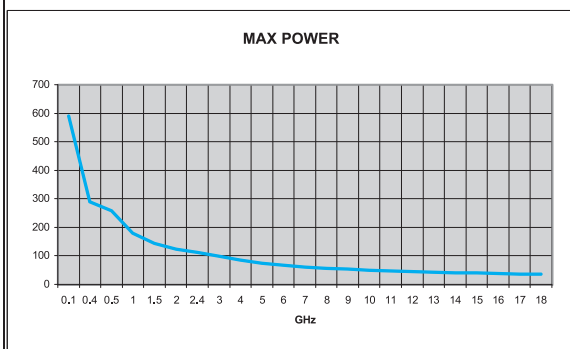
OUTER CONDUCTOR INTEGRITY: 60 POUNDS MINIMUM AXIAL PULL
MINIMUM BEND RADIUS (ONE TIME): 1.08 INCHES FIXED INSTALLATION
PREFERRED BEND RADIUS: 3.60 INCHES
TEMPERATURE RANGE: -50 / +85 DEGREES CELSIUS
WEIGHT MAXIMUM: 0.033 POUNDS PER FOOT

ELECTRICAL CHARACTERISTICS:

CENTER CONDUCTOR DC RESISTANCE 0.69 OHMS / 100 FEET NOMINAL
OUTER CONDUCTOR DC RESISTANCE 4.03 OHMS / 100 FEET NOMINAL
NOMINAL IMPEDANCE: 50 OHMS
NOMINAL CAPACITANCE: 28.7 pf / FT.
NOMINAL INDUCTANCE: 0.072 uh / FT
NOMINAL VELOCITY OF PROPAGATION: 70.7 %
NOMINAL DELAY: 1.44 nS / FT.
MAXIMUM OPERATING VOLTAGE: 2740 VRMS
MAXIMUM CW POWER RATING: 35 WATTS AT 18 GHz
MAXIMUM RETURN LOSS: -19 dB AT 18 GHz
MAXIMUM INSERTION LOSS: 73.5 dB / 100 FT AT 18 GHz
NOMINAL INSERTION LOSS: 68.1 dB / 100 FT AT 18 GHz
 To calculate maximum insertion loss at any frequency use the formula below:

$$13.662 \text{ times square root of freq. } + 0.864 \text{ times freq. } + 0 = \text{dB}/100'$$
RELATIVE SHIELDING: -90 dB DOUBLE SHIELDED

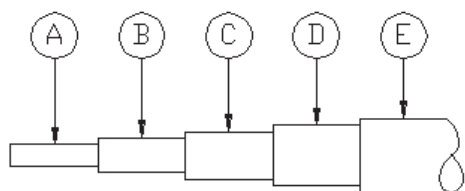
FEATURES: SEMI-RIGID REPLACEMENT CABLE
 EASILY FORMS INTO DESIRED SHAPE AND MAINTAINS ELECTRICAL PERFORMANCE



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TENSOLITE CABLE DATA SHEET



CABLE CODE: 565
CATEGORY: .250 Q-FLEX(R) PLUS
DESCRIPTION: RIGID REPLACEMENT
IMPEDANCE: 50 OHMS
MAX. OD: 0.295 INCHES
MAX. OPERATING FREQ.: 18 GHz.
CUT OFF FREQ.: 19.3 GHz.
CLAMP CABLE GROUP: N/A
SOLDER CABLE GROUP: 465, 565, 975
CRIMP CABLE GROUP: N/A
MIL SPEC: N/A
FLORIDA PART X REF.: 565

ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	STRANDED SILVER PLATED COPPER WIRE	0.068
B. DIELECTRIC:	SOLID PTFE	0.211
C. INNER BRAID:	HELICAL WRAP SILVER PLATED COPPER STRIP	0.224
D. OUTER BRAID:	SILVER PLATED COPPER WIRE	0.252
E. JACKET:	SOLID CLEAR POLYURETHANE	0.290

MECHANICAL CHARACTERISTICS:

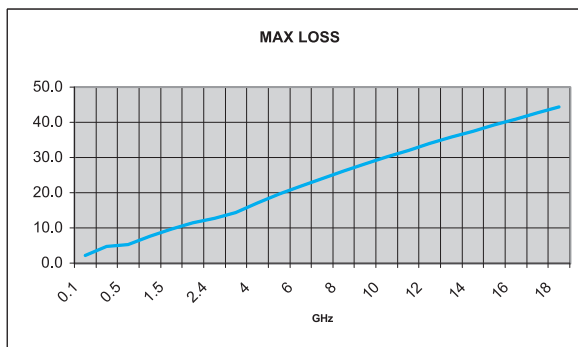
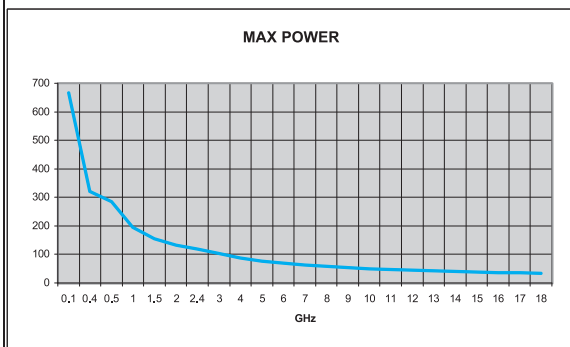
OUTER CONDUCTOR INTEGRITY: 80 POUNDS MINIMUM AXIAL PULL
MINIMUM BEND RADIUS (ONE TIME): 1.74 INCHES FIXED INSTALLATION
PREFERRED BEND RADIUS: 5.80 INCHES
TEMPERATURE RANGE: -50 / +85 DEGREES CELSIUS
WEIGHT MAXIMUM: 0.095 POUNDS PER FOOT

ELECTRICAL CHARACTERISTICS:

CENTER CONDUCTOR DC RESISTANCE 0.21 OHMS / 100 FEET NOMINAL
OUTER CONDUCTOR DC RESISTANCE 2.54 OHMS / 100 FEET NOMINAL
NOMINAL IMPEDANCE: 50 OHMS
NOMINAL CAPACITANCE: 28.7 pf / FT.
NOMINAL INDUCTANCE: 0.072 uh / FT
NOMINAL VELOCITY OF PROPAGATION: 70.7 %
NOMINAL DELAY: 1.44 nS / FT.
MAXIMUM OPERATING VOLTAGE: 4975 VRMS
MAXIMUM CW POWER RATING: 34 WATTS AT 18 GHz
MAXIMUM RETURN LOSS: -19 dB AT 18 GHz
MAXIMUM INSERTION LOSS: 44.4 dB / 100 FT AT 18 GHz
NOMINAL INSERTION LOSS: 41.5 dB / 100 FT AT 18 GHz
 To calculate maximum insertion loss at any frequency use the formula below:

$$6.85 \text{ times square root of freq. } + 0.850 \text{ times freq. } + 0 = \text{dB}/100'$$
RELATIVE SHIELDING: -90 dB DOUBLE SHIELDED

FEATURES: SEMI-RIGID REPLACEMENT CABLE
 EASILY FORMS INTO DESIRED SHAPE AND MAINTAINS ELECTRICAL PERFORMANCE



Data subject to change

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www.tensolite.com**

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