## **TMP<sup>®</sup> Interconnect Series**





## INTRODUCTION

Carlisle Interconnect Technologies TMP<sup>®</sup> connectors are designed to provide a convenient blind-mateable interconnect solution specifically for high power applications. The TMP<sup>®</sup> interface is comparable in size to an SMA connector, and offers similar power handling capability and durability in a push-on configuration. It is ideal for design in radar, missile and satellite systems, as well as, commercial applications.

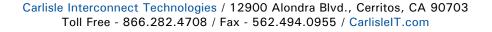
The design of the push-on interface enables use in microwave modules and dense packages, and facilitates rapid assembly and testing. The durable construction and ability to tolerate radial and axial misalignment allows for multiple engagement/disengagement cycles without degradation in electrical performance.

## FEATURES

- » Frequency Range: DC 23 GHz
- » 50  $\Omega$  Impedance; Blind-mateable configuration
- » > 5000 mate & de-mate cycles
- » MIL-PRF-39012 compliant
- » Ability to withstand Radial/Axial Misalignment
- » Board-mount, Field-replaceable, Bullets, and Cable Connector configurations
- » Custom Connectors Available

## SPECIFICATIONS

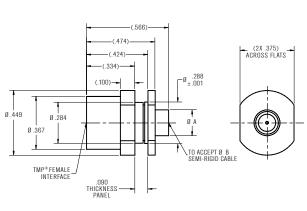
Parameter	Specification		
Impedance	50 <b>Ω</b>		
Frequency Range	DC - 23 GHz		
VSWR	1.2+.005xf (GHz)		
Insertion Loss	.05x√f (GHz)		
Radial Misalignment	+/020 inches		
Axial Misalignment	.000020 inches		
Temperature Range	-65°C to +125°C		
Power Handling	Over 200 Watts @ S Band		
Environmental	Meets MIL-PRF-39012 for Corrosion, Vibration, Moisture resistance, Thermal and Mechanical Shock.		
Force to Engage			
Full Detent	6.0 lbs typical		
Limited Detent	4.5 lbs typical		
Smooth Bore	3.0 lbs typical		
Force to Disengage			
Full Detent	7.5 lbs typical		
Limited Detent	6.0 lbs typical		
Smooth Bore	2.0 lbs typical		





# **TMP<sup>®</sup> Configurations**

## CABLE CONNECTORS

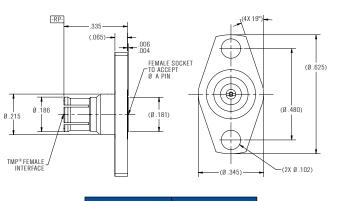


TMP<sup>®</sup> Female Bulkhead to Semi-Rigid Cable / MP503

Part I	Vumber	ØA	Cable Type(s)
-1	CCSF	(.100)	Ø .047 Semi-Rigid
-2	CCSF	(.120)	Ø .086 Semi-Rigid

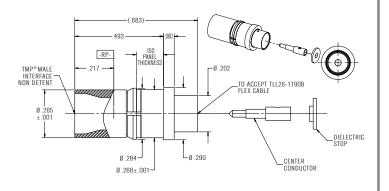
## FIELD REPLACEABLE CONNECTORS

#### TMP<sup>®</sup> Female 2 Hole Flange Mount / MP531

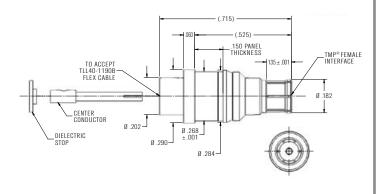




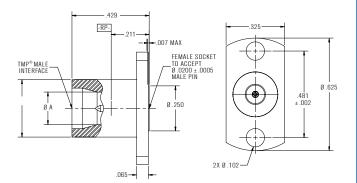
## TMP® Male Snap-In Panel Mount to TLL26-1190B Flex Cable / MP504



#### TMP® Female Snap-In Panel Mount to TLL40-1190B Flex Cable / MP505



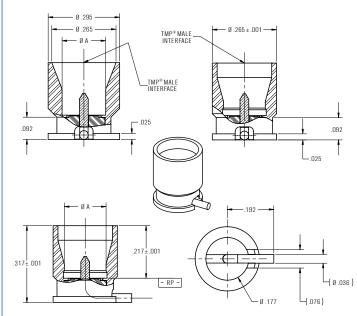
#### TMP<sup>®</sup> Male 2 Hole Flange Mount / MP532



Part Number	ØA	Interface(s)
-1CCSF	(.172)	Full Detent
-2CCSF	(.176)	Limited Detent
-3CCSF	(.180)	Smooth Bore

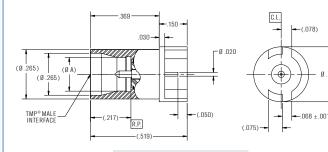
## PC BOARD CONNECTORS

#### TMP<sup>®</sup> Male to R/A Termination, Surface Mount / MP703



	Part Number	t Number Interface(s)	
	-100	Full Detent	
-2CC		Limited Detent	
	-3CC	Smooth Bore	

#### TMP<sup>®</sup> Plug Edge Mount to Straight Termination / MP602

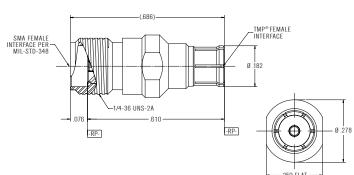




	Part Number	Interface(s)	
	-100	Full Detent	
-2CC		Limited Detent	
	-300	Smooth Bore	

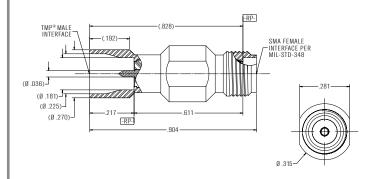
## ADAPTERS

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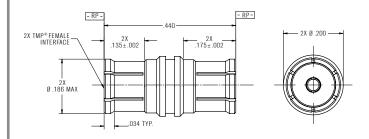
#### TMP<sup>®</sup> Female to SMA Female / MP543





## BULLETS

#### TMP<sup>®</sup> Female to TMP<sup>®</sup> Female / MP541



# **Ordering Information**





MP504

MP541





IVIF 332
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Configuration	Part Number	Description	Detent	Comments
	MP503-1CCSF	TMP (female) Bulkhead for 0.047" semi-rigid cables		
	MP503-2CCSF	TMP (female) Bulkhead for 0.086" semi-rigid cables		
Cable Connectors	MP504-1CCSF	TMP (male) panel mt. for Carlisle TLL26-1190B flexible cable		
Canie Connectors	MP504-2CCSF	TMP (male) panel mt. for 0.141" semi-rigid cables		
	MP505-1CC	TMP (female) panel mt. for Carlisle TLL26-1190B flexible cable		
	MP505-2CC	TMP (female) panel mt. for 0.141" semi-rigid cables		
	MP602-1CC		Full	Please consult factory if
	MP602-2CC	TMP plug (male) Edge Mount to straight termination for 0.062" thick hoards	Limited	connectors required for different board thickness
PC Board	MP602-3CC		Smooth Bore	
Connectors	MP703-1CC		Full	
	MP703-2CC	TMP plug (male) Surface Mount to right angle termination	Limited	
	MP703-3CC		Smooth Bore	
Bullets	MP541-1CC	TMP (female) to TMP (female) adapter, 0.440" length		
	MP531-1CC	TMP(female) 2-hole panel mount for 0.020" pins		
Field Replaceable	MP532-1CCSF*		Full	Please consult factory if connectors required for different pin diameters
Connectors	MP532-2CCSF*	TMP (male) 2-hole panel mount for 0.020" pins	Limited	
	MP532-3CCSF*		Smooth Bore	
Adaptava*	MP544-1CCSF	TMP (male) to SMA (female) adapter	Smooth Bore	
Adapters*	MP543-1CC	TMP (female) to SMA (female) adapter		

Parts with a 'CC' suffix are Gold Plated / Parts with a 'CCSF' suffix are Passivated Steel \*Standard parts have a Passivated Steel finish. Gold finish options also available.