

TMP® Interconnect Series



INTRODUCTION

Carlisle Interconnect Technologies TMP® connectors are designed to provide a convenient blind-mateable interconnect solution specifically for high power applications. The TMP® 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 Ω 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

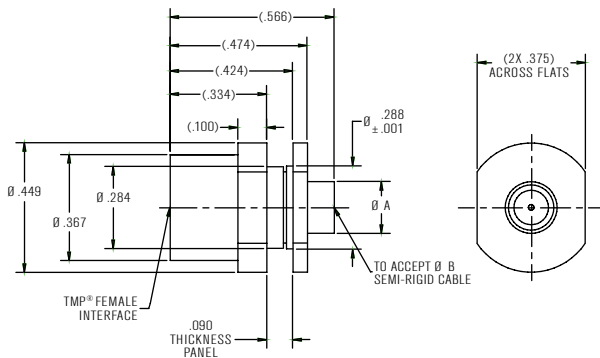
SPECIFICATIONS

Parameter	Specification
Impedance	50 Ω
Frequency Range	DC - 23 GHz
VSWR	1.2+.005xf (GHz)
Insertion Loss	.05x√f (GHz)
Radial Misalignment	+/- .020 inches
Axial Misalignment	.000 - .020 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	
<i>Full Detent</i>	6.0 lbs typical
<i>Limited Detent</i>	4.5 lbs typical
<i>Smooth Bore</i>	3.0 lbs typical
Force to Disengage	
<i>Full Detent</i>	7.5 lbs typical
<i>Limited Detent</i>	6.0 lbs typical
<i>Smooth Bore</i>	2.0 lbs typical

TMP® Configurations

CABLE CONNECTORS

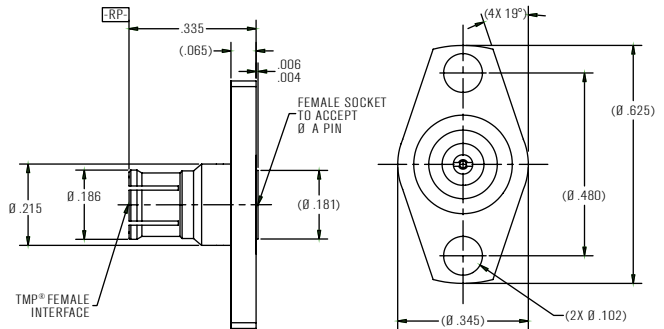
TMP® Female Bulkhead to Semi-Rigid Cable / MP503



Part Number	ϕA	Cable Type(s)
-1CCSF	(.100)	$\phi .047$ Semi-Rigid
-2CCSF	(.120)	$\phi .086$ Semi-Rigid

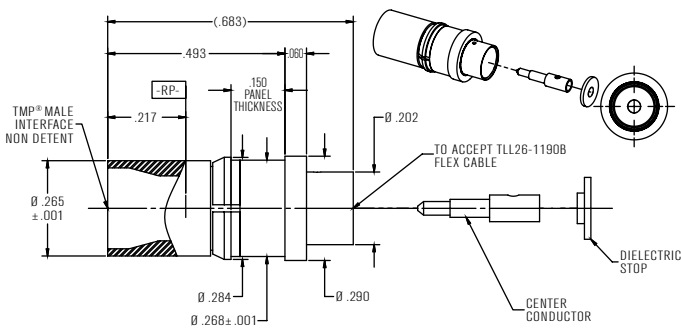
FIELD REPLACEABLE CONNECTORS

TMP® Female 2 Hole Flange Mount / MP531

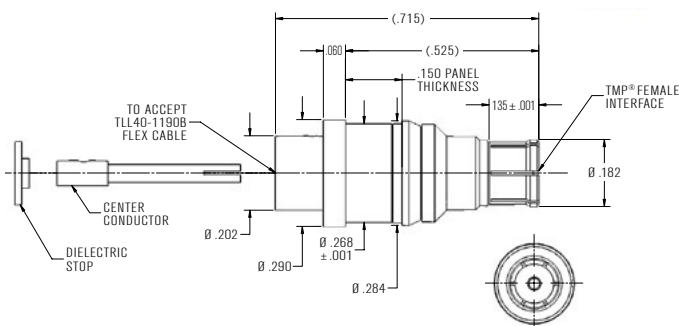


Part Number	ϕA
-1CC	$.0200 \pm .0005$

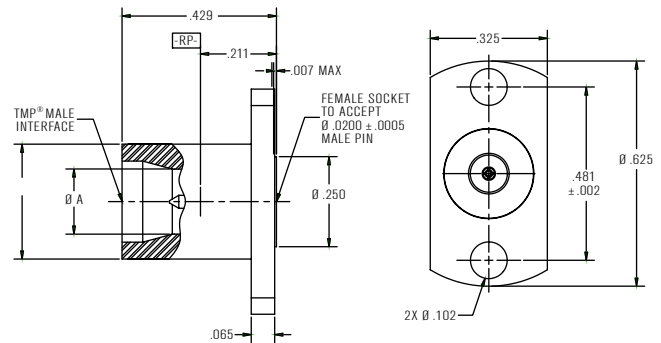
TMP® Male Snap-In Panel Mount to TLL26-1190B Flex Cable / MP504



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



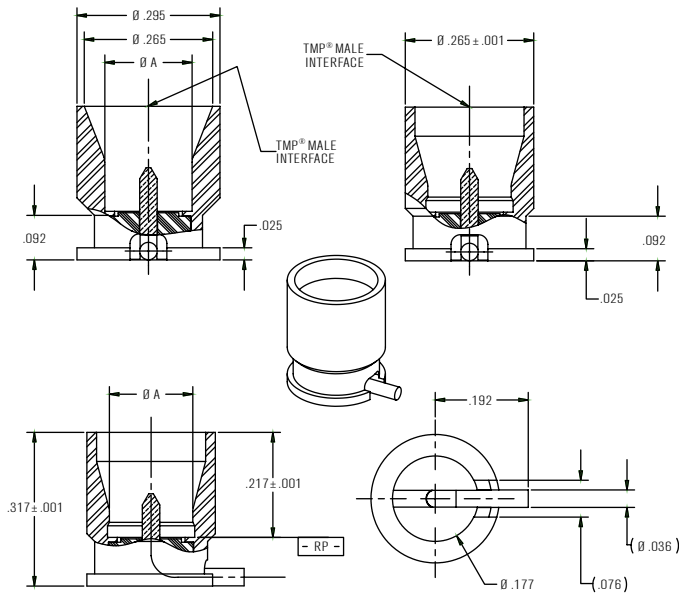
TMP® Male 2 Hole Flange Mount / MP532



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

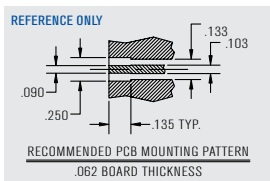
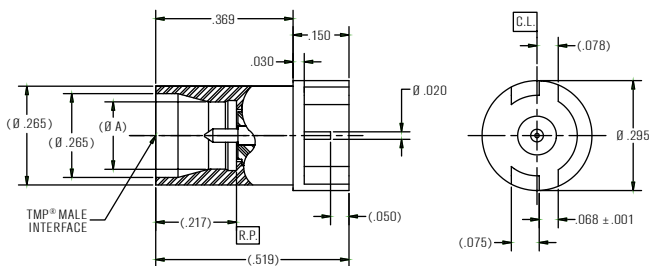
PC BOARD CONNECTORS

TMP® Male to R/A Termination, Surface Mount / MP703



Part Number	Interface(s)
-1CC	Full Detent
-2CC	Limited Detent
-3CC	Smooth Bore

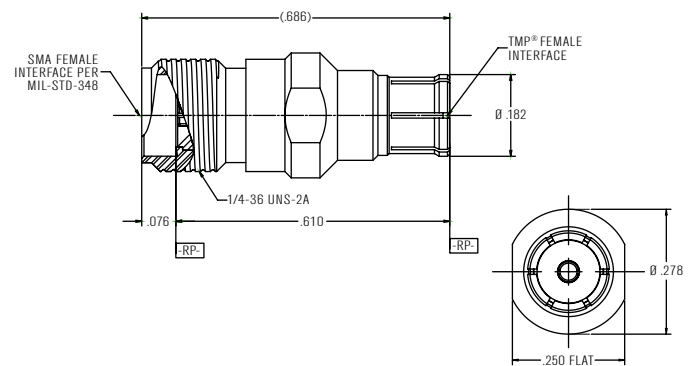
TMP® Plug Edge Mount to Straight Termination / MP602



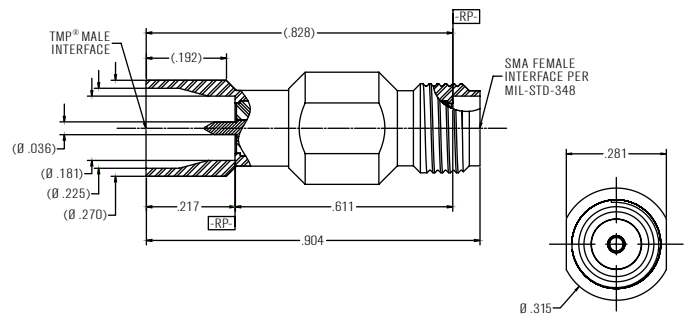
Part Number	Interface(s)
-1CC	Full Detent
-2CC	Limited Detent
-3CC	Smooth Bore

ADAPTERS

TMP® Female to SMA Female / MP543

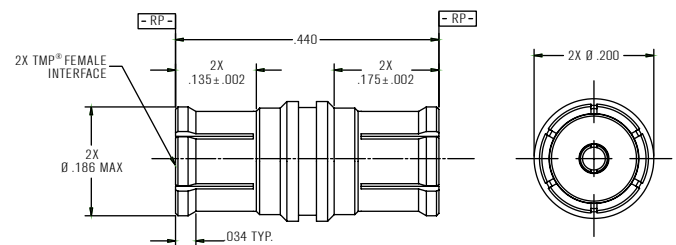


TMP® Male to SMA Female / MP544

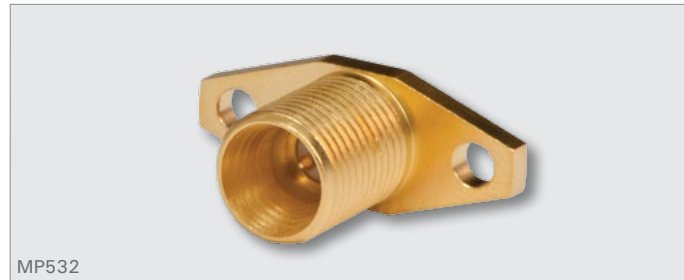


BULLETS

TMP® Female to TMP® Female / MP541



Ordering Information



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