



SMP Coaxial Connectors

Connector Specifications

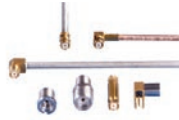
The SMP coax connector line features a snap-in vibration proof connection, suitable for high shock mobile applications and space level connector requirements of extreme random vibration, thermal shock, and outgassing environments. Frequency range is DC-40 GHz with low VSWR.

The extremely small package size allows for high density board-to-board applications. Blind mate SMP connectors are available in smooth bore for maximum float of mating (0.015" radial and axial misalignment between mating planes). The full and limited detent SMP connections are suitable for mobile applications with extreme shock and vibration requirements. These connectors meet or exceed the applicable requirements of DSCC drawing numbers 94007, 94008 and MIL-STD-348.

In addition to the SMP coaxial connector line, Sabritec offers a smaller SMPM series. The SMPM series is available with detent and non detent mating levels with blindmate capabilities. The SMPM coaxial connector is 30% smaller than the SMP and has the advantage of a higher frequency range capable of 60 GHz.

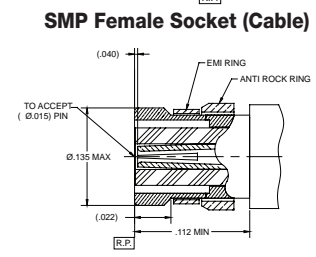
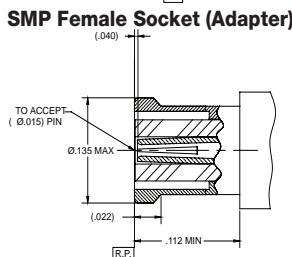
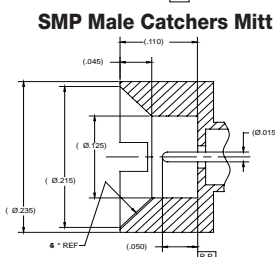
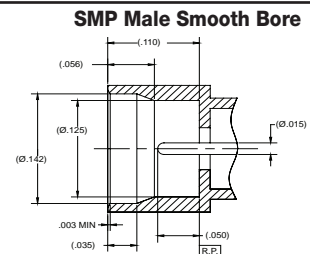
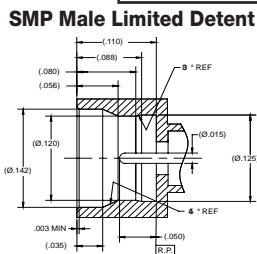
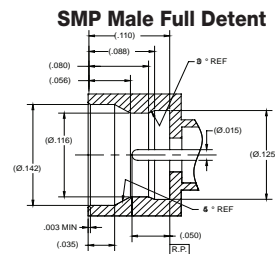
Features and Benefits:

- Meets extreme shock and high vibration requirements
- Snap in connection
- Durable light weight construction
- Ideal for high density packaging
- Full and limited detent locking
- Blind-mate smooth bore series available
- Space approved SMP connectors available
- Permits high density board-to-board connections
- Gold plated contact members



Mechanical & Environmental Specifications	
Temperature Rating	-65°C to + 165°C
Corrosion	MIL-STD-202 Method 101, Test Condition B
Shock	MIL-STD-202 Method 213, Test Condition B
Vibration	MIL-STD-202 Method 204, Test Condition B
Thermal Shock	MIL-STD-202 Method 107, Test Condition B
Durability	100 cycles min.
Force to Engage	Full Detent: 15 lbs max Limited Detent: 10 lbs max Smooth Bore, Catchers Mitt: 2 lbs max
Force to Disengage	Full Detent: 5 lbs max Limited Detent: 2 lbs max Smooth Bore, Catchers Mitt: 0.5 lbs max
Electrical Specifications	
Dielectric Withstanding Voltage	500 VRMS @sea level
Insulation Resistance	5000 mega-ohms min. @ 200 VRMS
Voltage Rating	335 VRMS @ sea level
Impedance	50 Ohm constant airline impedance
Frequency Range	DC to 40 GHz
VSWR	DC to 26.5 GHz 1.15 max 26.5 to 40 GHz 1.5:1 max
Material & Finishes	
Center & Outer Spring Contacts	BeCu per ASTM-B196, alloy UNS C17200, C17300 Gold plate per MIL-DTL-45204, Type II, Class 1
Shell	Brass per ASTM-16, alloy UNS C36000 Gold plate per MIL-DTL-45204, Type II, Class 1 or 305 CRES per ASTM-A240, passivated per ASTM-A967
Insulators	PTFE per ASTM D-1710 or equivalent
Interconnect Configurations	
Flange Mount Right Angle Flange Mount Thread-In Box Mount Press-In Flange Mount PCB Mount, Right Angle & Straight Cable Connectors, Semi-Rigid & Flexible RG Cables	

Interface Dimensions

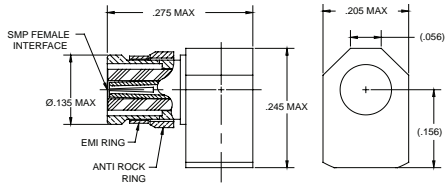




SMP Coaxial Connectors

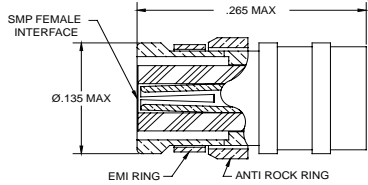
Cable Mount/PCB Connectors

SMP Right Angle Female to S/R Cable



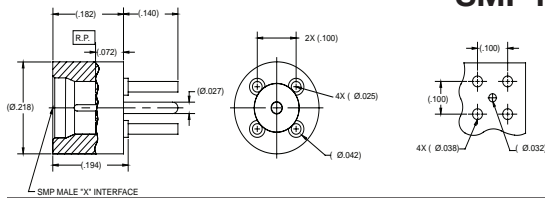
Part Number	Cable Type	Cable
219936-1000	Semi-Rigid	SR.047
219909-1001	Semi-Rigid	SR.086

SMP Straight Female to Semi Rigid Cable



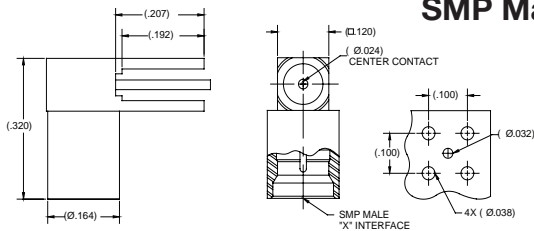
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219936-3000	Semi-Rigid	SR.047
219909-3001	Semi-Rigid	SR.086

SMP Male to Straight PCB Mount



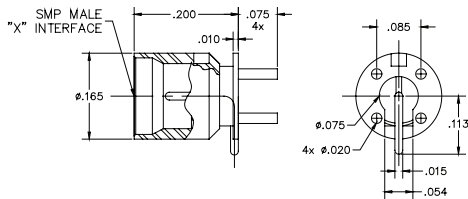
Part Number	Detent Level
219900-2000	FD
219900-2001	LD
219900-2002	SB

SMP Male to Right Angle PCB Mount



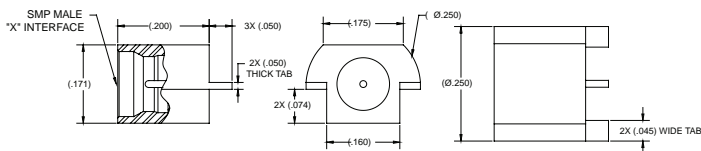
Part Number	Detent Level
219900-1000	FD
219900-1001	LD
219900-1002	SB

SMP Male Straight PCB Mount



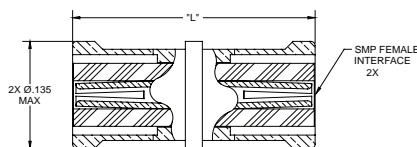
Part Number	Detent Level
219900-2003	FD
219900-2004	LD
219900-2005	SB

SMP Male PCB Edge Launch to Straight Termination



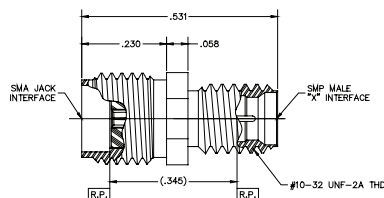
Part Number	Detent Level
219900-2006	FD
219900-2007	LD
219900-2008	SB

SMP Female to Female Adapter



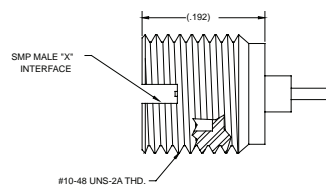
Part Number	Length
219900-4000	0.254
219900-4001	0.395
219900-4002	0.484
219900-4003	0.568

SMA Female to SMP Male Thread-In Adapter



Part Number	Detent Level
219900-4008	FD
219900-4009	LD
219900-4010	SB

SMP Male Straight Termination



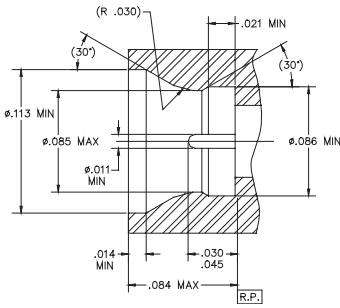
Part Number	Detent Level
219900-2009	FD
219900-2010	LD
219900-2011	SB



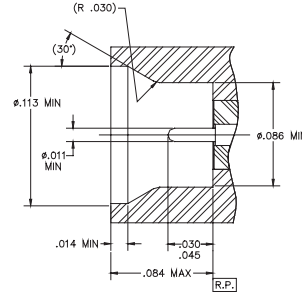
SMPM Coaxial Connectors

Interface Mating Dimensions

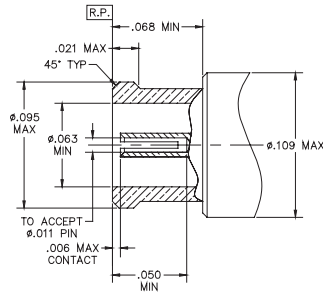
SMPM Male Detent



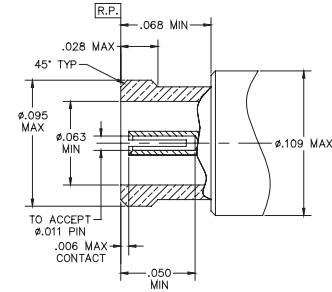
SMPM Male Non-Detent



SMPM Female (Adapter)

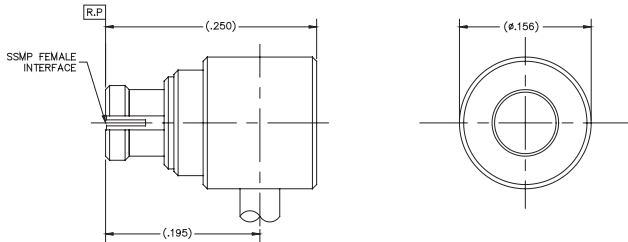


SMPM Female (Cable)



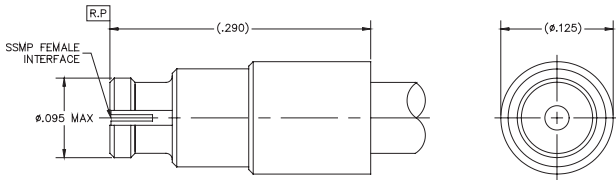
SMPM Cable Mount Connectors/Adapters

SMPM Right Angle Female to S/R Cable



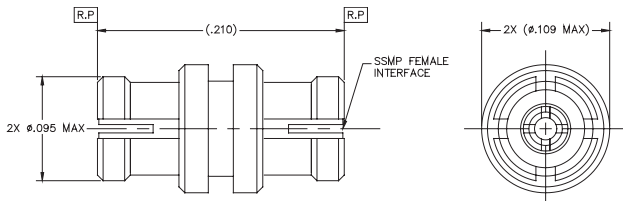
Part Number	Cable Type	Cable
229909-1000	Semi-Rigid	SR.047
229909-1001	Semi-Rigid	SR.086

SMPM Straight Female to S/R Cable



Part Number	Cable Type	Cable
229909-3000	Semi-Rigid	SR.047
229909-3001	Semi-Rigid	SR.086

SMPM Female to Female Adapter



P/N 229900-4000