

Engineering Grade SMA Female (Jack) to SMP Male (Plug) Smooth Bore Adapter with Passivated Stainless Steel Body



FMAD10166

Configuration

- SMA Female Connector 1
- Smooth Bore SMP Male Connector 2
- 50 Ohms Impedance
- Engineering Grade Design
- Straight Body Geometry

Features

- VSWR of 1.15:1 max up to 18 GHz
- SMA interface meets MIL-STD-348B
- SMP interface meets MIL-STD-348B
- Gold over Nickel Alloy over Copper Plated Beryllium Copper Contact

Applications

- Enables Between Series Connections
- General Purpose Test

Description

SMA female to SMP male smooth bore adapter part number FMAD10166 from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMP adapter has a female to male gender configuration and is built of durable stainless steel in a engineering grade design. FMAD10166 SMA female to SMP male adapter operates to 18 GHz. The Fairview Microwave RF adapter provides excellent VSWR of 1.15:1 maximum. The SMA connector mates mechanically with commercially available 3.5mm and 2.92mm (K) connectors.

RF adapters can be used to enable connections between two connector types that would otherwise not mate. Certain RF adapter configurations can also be used to protect connectors on expensive equipment where the number of connect and disconnect cycles is high. An RF, microwave, or millimeter wave adapter is connected to the equipment and the commonly changed connection is made with the adapter which can be easily replaced when it wears out after high usage; such adapters are referred to as connector savers. Fairview Microwave also offers bulkhead, panel mount, hermetically sealed, reverse polarity, and isolated ground adapter varieties to serve all of your RF, microwave and millimeter wave needs.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		18	GHz
Impedance		50		Ohms
VSWR			1.15:1	
Insertion Loss			0.254	dB
Operating Voltage (AC)			335	Vrms
Dielectric Withstanding Voltage (AC)			500	Vrms
Insulation Resistance	5,000			MOhms

Electrical Specification Notes:
Insertion loss = $0.06 \cdot \sqrt{\text{FGHz}}$ dB

Mechanical Specifications

Size

Length	0.72 in [18.19 mm]
Width	0.28 in [6.99 mm]
Height	0.28 in [6.99 mm]

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Weight	0.05 lbs [22.68 g]	
Description	Connector 1	Connector 2
Polarity	Standard	Standard
Interface Specification	MIL-STD-348B	MIL-STD-348B
Mating Cycles, Min	500	1,000
Mating Torque	7 to 9.5 in-lbs 0.79 to 1.07 Nm	
Contact Captivation Axial Force, Min	6.1 lbs [2.77 kg]	
Coupling Proof Torque	15 in-lbs [1.7 Nm]	

Mechanical Specification Notes:
Engagement Force: ≤2 lbs Disengagement
Force: ≥0.5 lbs
Axial Misalignment: +0.00/-0.25(+.000/-0.010)
Radial Misalignment: +/-0.25(0.010)

Material Specifications

Description	Connector 1		Connector 2	
	Material	Plating	Material	Plating
Type	SMA Female		Smooth Bore SMP Male	
Contact	Beryllium Copper	Gold over Nickel Alloy over Copper	Beryllium Copper	Gold over Nickel Alloy over Copper
Insulation	PPO		PTFE	
Outer Conductor	Passivated Stainless Steel		Passivated Stainless Steel	
Body	Passivated Stainless Steel		Passivated Stainless Steel	

Environmental Specifications

Temperature	
Operating Range	-55 to +105 °C
Humidity	MIL-STD-202, Method 106
Thermal Shock	MIL-STD-202, Method 107, Condition B
Salt Spray	MIL-STD-202, Method 101, Condition B

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Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Engineering Grade SMA Female (Jack) to SMP Male (Plug) Smooth Bore Adapter with Passivated Stainless Steel Body from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Engineering Grade SMA Female \(Jack\) to SMP Male \(Plug\) Smooth Bore Adapter with Passivated Stainless Steel Body FMAD10166](#)

URL: <https://www.fairviewmicrowave.com/product/rf-adapters/engineering-grade-sma-female-to-smp-male-smooth-bore-adapter-mil-std-202-method-106-with-passivated-stainless-steel-body-fmad10166.html>

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