

Engineering Grade SMA Female (Jack) to Mini SMP Female (Jack) Push-On Adapter



FMAD10180

Configuration

- SMA Female Connector 1
- Push-On Mini SMP Female 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
- Mini 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 Mini SMP female push-on adapter part number FMAD10180 from Fairview Microwave is in-stock and ships same day. This Fairview SMA to Mini SMP adapter has a female to female gender configuration in a engineering grade design. FMAD10180 SMA female to Mini SMP female 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)			325	Vrms
Dielectric Withstanding Voltage (AC)			500	Vrms
Insulation Resistance	5,000			MOhms

Electrical Specification Notes:
Insertion loss = 0.06*SQRT(FGHz) dB

Mechanical Specifications

Size

Length	0.65 in [16.59 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	
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: 3.5 lbs typ (Full Detent), 1.5 lbs typ (Smooth Bore)
 Disengagement Force: 5.0 lbs typ (Full Detent), 1.5 lbs typ (Smooth Bore)
 Durability (Mating): ≥100 (Full Detent), ≥1000 (Smooth Bore)
 Contact Captivation-axial: ≥1.5 lbs (Full Detent), ≥1.5 lbs (Smooth Bore)

Material Specifications

Description	Connector 1		Connector 2	
	Material	Plating	Material	Plating
Type	SMA Female		Push-On Mini SMP Female	
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		Beryllium Copper	Gold over Nickel Alloy over Copper
Body	Passivated Stainless Steel		Beryllium Copper	Gold over Nickel Alloy over Copper

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 Mini SMP Female (Jack) Push-On Adapter 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 Mini SMP Female \(Jack\) Push-On Adapter FMAD10180](#)

URL: <https://www.fairviewmicrowave.com/product/rf-adapters/engineering-grade-sma-female-to-mini-smp-female-push-on-adapter-mil-std-202-method-106-with-beryllium-copper-body-fmad10180.html>

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume liability arising out of the use of any part or document.

