

Engineering Grade 2.4mm Female (Jack) to Mini SMP Female (Jack) Push-On Adapter



FMAD10174

Configuration

- 2.4mm Female Connector 1
- Push-On Mini SMP Female Connector 2
- 50 Ohms Impedance
- Engineering Grade Design
- Straight Body Geometry

Features

- VSWR of 1.4:1 max up to 50 GHz
- 2.4mm 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

2.4mm female to Mini SMP female push-on adapter part number FMAD10174 from Fairview Microwave is in-stock and ships same day. This Fairview 2.4mm to Mini SMP adapter has a female to female gender configuration in a engineering grade design. FMAD10174 2.4mm female to Mini SMP female adapter operates to 50 GHz. The Fairview Microwave RF adapter provides good VSWR of 1.4:1 maximum. The 2.4mm connector mates mechanically with commercially available 1.85mm (V) 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		50	GHz
Impedance		50		Ohms
VSWR			1.4:1	
Insertion Loss			0.353	dB
Operating Voltage (AC)			150	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	0.90 in [22.89 mm]
Width	0.35 in [8.99 mm]
Height	0.35 in [8.99 mm]

Engineering Grade 2.4mm Female (Jack) to Mini SMP Female (Jack) Push-On Adapter



FMAD10174

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 9.74 in-lbs 0.79 to 1.10 Nm	
Contact Captivation Axial Force, Min	4.5 lbs [2.04 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	2.4mm Female		Push-On Mini SMP Female	
Contact	Beryllium Copper	Gold over Nickel Alloy over Copper	Beryllium Copper	Gold over Nickel Alloy over Copper
Insulation	PCTFE		PPO	
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

Engineering Grade 2.4mm Female (Jack) to Mini SMP Female (Jack) Push-On Adapter



FMAD10174

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

Plotted and Other Data

Engineering Grade 2.4mm 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 2.4mm Female \(Jack\) to Mini SMP Female \(Jack\) Push-On Adapter FMAD10174](#)

URL: <https://www.fairviewmicrowave.com/product/rf-adapters/engineering-grade-2.4mm-female-to-mini-smp-female-push-on-adapter-mil-std-202-method-106-with-passivated-stainless-steel-body-fmad10174.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.

FMAD10174 CAD Drawing

Engineering Grade 2.4mm Female (Jack) to Mini SMP Female (Jack) Push-On Adapter

