

## Mini SMP Male (Plug) Non-magnetic Smooth Bore PCB Connector Surface Mount PCB Solder Attachment



### FMCN5491

#### Configuration

- Smooth Bore Mini SMP Male Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: Surface Mount PCB
- Non-magnetic Design

#### Features

- Operating Frequency of 20 GHz Max.
- Good VSWR of 1.35:1
- Blind Mate Connector
- Gold over Nickel Alloy over Copper Plated Beryllium Copper Contact

#### Applications

- General Purpose Test
- Space Saving for PCB Applications

#### Description

Mini SMP Male Smooth Bore Connector Solder Attachment for Surface Mount PCB, part number FMCN5491, from Fairview Microwave is in-stock and ships same day. This Mini SMP male connector operates up to a maximum frequency of 20 GHz and offers good VSWR of 1.35:1. This blind mate connector is ideal for applications without direct visual or tactile access to the connection point, for example, when two circuit boards need to be mated.

Fairview's Mini SMP male connector FMCN5491 datasheet specifications and outline drawing are shown in this PDF below. Our extensive offering of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. From providing an I/O for a board design to creating a custom cable assembly configuration, Fairview Microwave has a connector solution to meet your needs. Fairview Microwave also has the expertise to build your custom cable assemblies for you and ship them same-day

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		20	GHz
VSWR			1.35:1	
Insertion Loss			0.447	dB
Dielectric Withstanding Voltage (AC)			325	Vrms
Inner Conductor DC Resistance			6	mOhms
Outer Conductor DC Resistance			2	mOhms
Insulation Resistance	5,000			MOhms
Impedance		50		Ohms

#### Mechanical Specifications

##### Size

Length	0.091 in [2.31 mm]
Width	0.127 in [3.23 mm]
Height	0.127 in [3.23 mm]
Weight	0.0009 lbs [0.41 g]
Mating Cycles	100 Cycles
Engagement Force	3.5lbs [1.59kg]

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**FMCN5491**

Disengagement Force 5lbs [2.27kg]

**Material Specifications**

Description	Material	Plating
Contact	Beryllium Copper	Gold over Nickel Alloy over Copper
Body	Beryllium Copper	Gold over Nickel Alloy over Copper

**Environmental Specifications**

**Temperature**

Operating Range -65 to +165 deg 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

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

**Plotted and Other Data**

Notes:

Mini SMP Male (Plug) Non-magnetic Smooth Bore PCB Connector Surface Mount PCB Solder Attachment 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: [Mini SMP Male \(Plug\) Non-magnetic Smooth Bore PCB Connector Surface Mount PCB Solder Attachment FMCN5491](#)

URL: <https://www.fairviewmicrowave.com/product/rf-connectors/mini-smp-male-smooth-bore-surface-mount-pcb-pcb-connector-fmcn5491.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.

# FMCN5491 CAD Drawing

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