

Non-magnetic SMPM Plug (Male) Full Detent
PCB Surface Mount with separate Round
Contact Pin (0.012 inches diameter)



FMCN5490

Configuration

- Full Detent 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 Full Detent Connector Solder Attachment for Surface Mount PCB, part number FMCN5490, 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 FMCN5490 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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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:

Non-magnetic SMPM Plug (Male) Full Detent PCB Surface Mount with separate Round Contact Pin (0.012 inches diameter) 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.

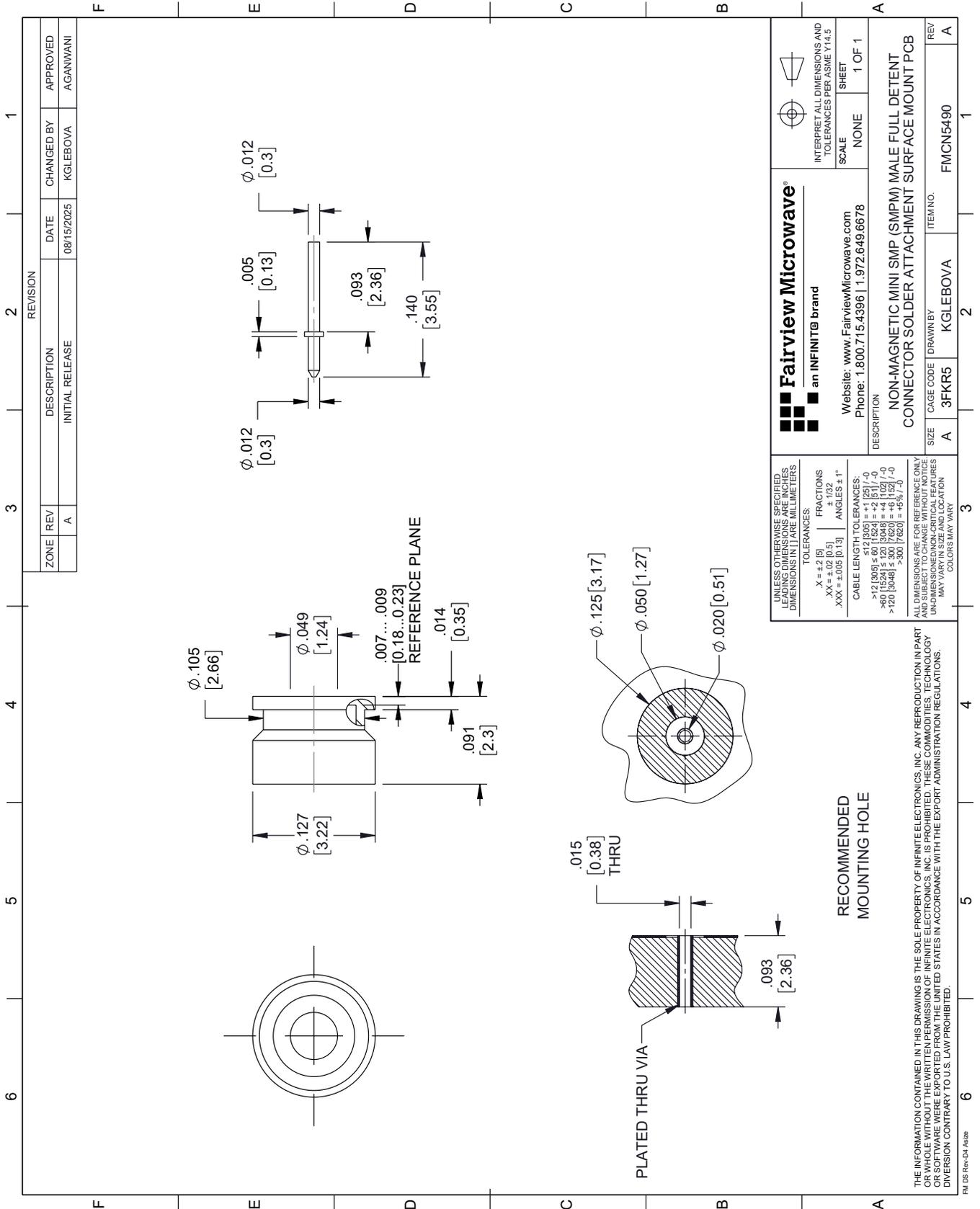
For additional information on this product, please click the following link: [Non-magnetic SMPM Plug \(Male\) Full Detent PCB Surface Mount with separate Round Contact Pin \(0.012 inches diameter\) FMCN5490](#)

URL: <https://www.fairviewmicrowave.com/product/rf-connectors/mini-smp-male-full-detent-surface-mount-pcb-pcb-connector-fmcn5490.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.

FMCN5490 CAD Drawing

Non-magnetic SMPM Plug (Male) Full Detent PCB Surface Mount with separate Round Contact Pin (0.012 inches diameter)



REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV	DESCRIPTION	INITIAL RELEASE	
	A			AGANWANI

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UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS.

TOLERANCES:
 .X = ±.2 [5] FRACTIONS ± 1/32
 .XX = ±.02 [0.5] ANGLES ± 1°
 .XXX = ±.005 [0.13]

CABLE LENGTH TOLERANCES:
 <12 [305] ±.60 [1524] = ±.2 [5] / -0
 >12 [305] ≤ 60 [1524] = ±.2 [5] / -0
 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0
 >120 [3048] ≤ 300 [7620] = ±.8 [20] / -0
 >300 [7620] = ±.8 [20] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE SHEET: 1 OF 1

DESCRIPTION: NON-MAGNETIC MINI SMP (SMPM) MALE FULL DETENT CONNECTOR SOLDER ATTACHMENT SURFACE MOUNT PCB

SIZE: A CAGE CODE: 3FKR5 DRAWN BY: KGLEBOVA ITEM NO.: FMCN5490 REV: A

RECOMMENDED MOUNTING HOLE

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