

2.2-5 Male Low PIM Connector Solder Attachment for TFT-5G-402



TC-402-225M-LP



Times Microwave Systems Connector Specification

Configuration

- 2.2-5 Male Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: TFT-5G-402
- Low PIM Design

Features

- Operating Frequency of 6 GHz Max.
- Good VSWR of 1.3:1
- PIM levels better than -160 dBc
- Silver Plated Beryllium Copper Contact
- 200 µin contact plating

Applications

- General Purpose Test
- Wireless Communications
- Custom Cable Assemblies
- Low PIM Applications
- Distributed Antenna Systems (DAS)

Description

2.2-5 Male Connector Solder/Solder Attachment for TFT-5G-402 Cable,, part number TC-402-225M-LP, from Fairview Microwave is in-stock and ships same day. This 2.2-5 male connector operates up to a maximum frequency of 6 GHz and offers good VSWR of 1.3:1. The 2.2-5 male connector also has low passive intermodulation (PIM) of -160 dBc.

Fairview's 2.2-5 male connector TC-402-225M-LP 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		6	GHz
VSWR			1.3:1	
Insertion Loss			0.24	dB
Passive Intermodulation IM3 (2x43dBm Tones)			-160	dBc
Operating Voltage (DC)			1,500	Vdc
Insulation Resistance	5,000			MOhms
Impedance		50		Ohms

Electrical Specification Notes:
Insertion Loss is $0.1 \cdot \sqrt{f(\text{GHz})}$

Mechanical Specifications

Size
Length 0.854 in [21.69 mm]

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TC-402-225M-LP

Width	0.65 in [16.51 mm]
Height	0.65 in [16.51 mm]
Weight	0.03 lbs [13.61 g]
Mating Cycles	100 Cycles
Mating Torque	26 in-lbs [[2.94 Nm]]
Cable Retention Force	33 lbs [14.97 kg]

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Silver 200 µin
Insulation	PTFE	
Body	Brass	Silver 100 µin
Coupling Nut	Brass	Tri-Metal 100 µin

Environmental Specifications

Temperature	
Operating Range	-40 to +125 deg C
Shock	MIL-STD 202G, Meth. 213, Cond. I
Vibration	MIL-STD 202G, Meth. 204, Cond. B
Thermal Shock	MIL-STD 202G, Meth. 107, Cond. B
Environmental Specification Notes:	
Climatic Class: IEC 60068 55/155/56	

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

Plotted and Other Data

Notes:

2.2-5 Male Low PIM Connector Solder Attachment for TFT-5G-402 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: [2.2-5 Male Low PIM Connector Solder Attachment for TFT-5G-402 TC-402-225M-LP](#)

URL: <https://www.fairviewmicrowave.com/product/rf-connectors/2.2-5-male-tft-402-connector-tc-402-225m-lp.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.

INSTALLATION INSTRUCTION

1. TRIM CABLE TO DIMENSIONS SHOWN. BE CAREFUL TO AVOID NICKING THE INNER AND OUTER CONDUCTOR. CONNECTOR ADDS: 15.7mm [0.618"]

2. A. PUT ON THE PIN. B. SOLDER THE INNER CONDUCTOR.

3. A. PUT ON THE HEAT SHRINK TUBE. B. PRESS THE PIN INTO THE BODY. C. SOLDER THE OUTER CONDUCTOR. D. HEAT SHRINK TUBE OVER REAR OF CONNECTOR BODY AND DOWN ON TO CABLE JACKET USING HOT AIR GUN.

PLEASE NOTE: IT'S IMPORTANT THAT THE SOLDERING OF THE OUTER BRAID IS VOID FREE AT THE BOTTOM OF THE CABLE ENTRY HOLE. USING INDUCTION SOLDERING EQUIPMENT HELPS TO BRING THE WHOLE CONNECTOR BODY UP TO TEMPERATURE. IF YOU ARE USING RESISTANCE TWEEZERS OF A TRADITIONAL SOLDERING IRON, YOU WILL WANT TO MAKE SURE THAT YOU APPLY THE HEAT IN SUCH A WAY THAT THE SOLDER WILL FLOW TO THE BOTTOM OF THE CABLE ENTRY HOLE.

TIN DIPPING: THE VERY END OF THE CABLE PRIOR TO PREPPING WILL HELP THE SOLDER EVENLY DISTRIBUTE AND BE VOID FREE.

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ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	C	UPDATED PER ECO-14326	3/5/2025	HBAKKE	SRAUTUS

FAIRVIEW MICROWAVE® an INFINITI® brand		Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678
DESCRIPTION		2.2-5 MALE LOW PIN CONNECTOR SOLDER ATTACHMENT FOR TFT-5G-402
SIZE	CAGE CODE	DRAWN BY
A	3FKR5	DMAY
ITEM NO.	TC-402-225M-LP	
REV	C	