

N Female Low PIM Connector Solder Attachment for SPP-250-LLPL, SPO-250, SPF-250 Cable



TC-250-NF-LP



Times Microwave Systems Connector Specification

Configuration

- N Female Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: SPP-250-LLPL, SPF-250, SPO-250, 1/4" Superflexible, FM-1/4SFHC
- Low PIM Design

Features

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

Applications

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

Description

Type N Female Low PIM Connector Solder/Solder Attachment for SPP-250-LLPL, SPF-250, SPO-250, 1/4" Superflexible and FM-1/4SFHC Cable, part number TC-250-NF-LP, from Times Microwave offered by Fairview Microwave is in-stock and ships same day. This type N female connector operates up to a maximum frequency of 6 GHz and offers good VSWR of 1.3:1. The type N female connector also has low passive intermodulation (PIM) of -160 dBc.

Times Microwave's type N female connector TC-250-NF-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			0.25	dB
Passive Intermodulation			-160	
Operating Voltage (AC)			4,000	Vrms
Insulation Resistance	10,000			MOhms
Impedance		50		Ohms

Electrical Specification Notes:
Insertion Loss= $-0.1 \cdot \sqrt{F(\text{GHz})}$

Mechanical Specifications

Size

Length	1.33 in [33.78 mm]
Width	0.94 in [23.88 mm]
Height	0.94 in [23.88 mm]

N Female Low PIM Connector Solder Attachment
for SPP-250-LLPL, SPO-250, SPF-250 Cable



TC-250-NF-LP

Weight	0.1205 lbs [54.66 g]
Mating Cycles	500 Cycles
Mating Torque	9.74 to 15 in-lbs [1.10 to 1.70 Nm]
Cable Retention Force	200 lbs 90.72 kg

Material Specifications

Description	Material	Plating
Contact	Brass	Silver 200 µin
Insulation	PTFE	
Outer Conductor	Brass	Tri-Metal 100 µin
Body	Brass	Tri-Metal 100 µin
Gasket	Silicone Rubber	

Environmental Specifications

Temperature	
Operating Range	-40 to +125 deg C
Shock	MIL-STD 202G, Method 213, Condition I
Vibration	MIL-STD 202G, Method 204, Condition B
Thermal Shock	MIL-STD 202G, Method 107, Condition B

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

Plotted and Other Data

Notes:

N Female Low PIM Connector Solder Attachment for SPP-250-LLPL, SPO-250, SPF-250 Cable 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.

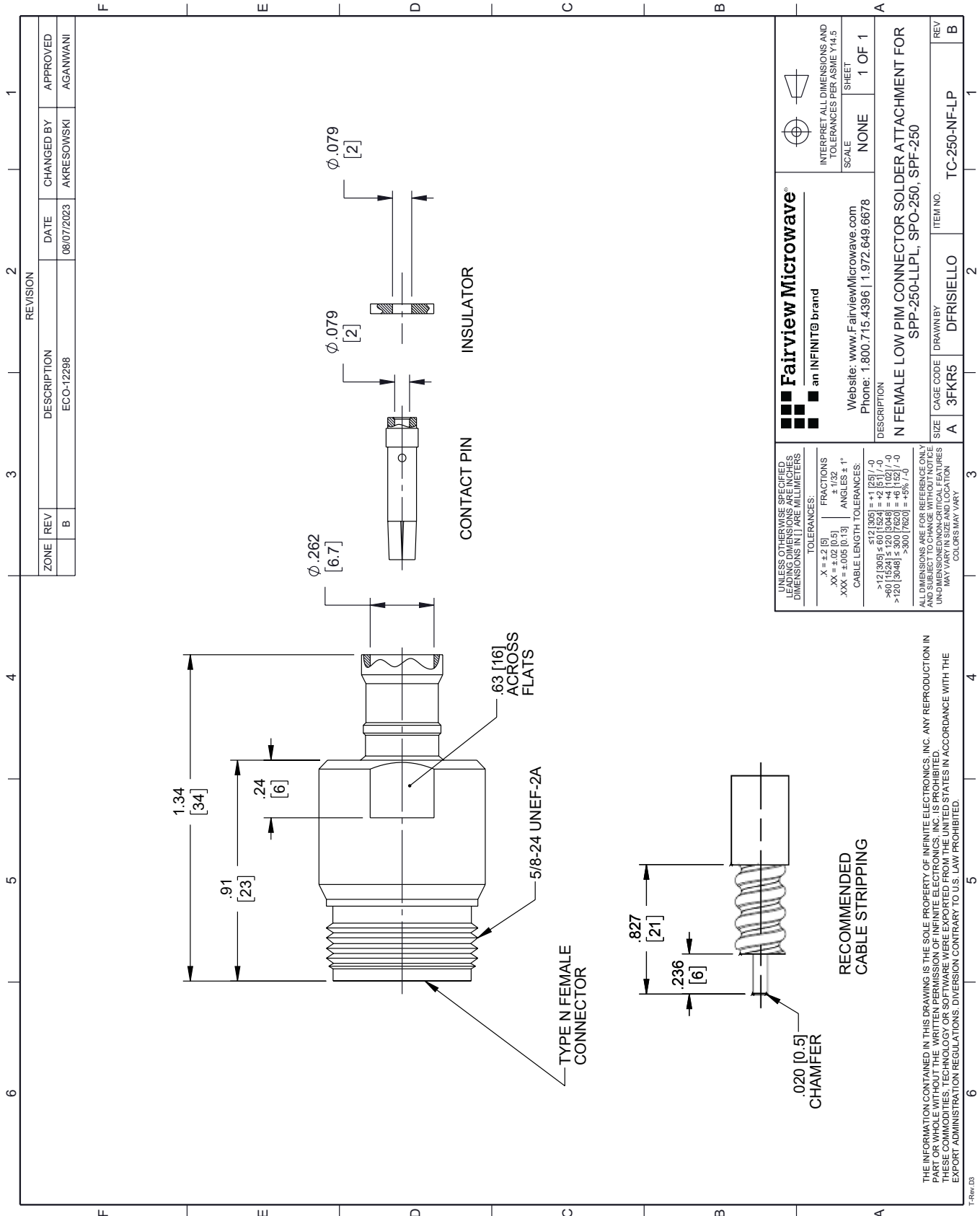
For additional information on this product, please click the following link: [N Female Low PIM Connector Solder Attachment for SPP-250-LLPL, SPO-250, SPF-250 Cable TC-250-NF-LP](#)

URL: <https://www.fairviewmicrowave.com/n-female-spp-250-llpl-spf-250-spo-250-1-4-inch-superflexible-fm-1-4sfhc-connector-tc-250-nf-lp-p.aspx>

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.

TC-250-NF-LP CAD Drawing

N Female Low PIM Connector Solder Attachment for SPP-250-LLPL, SPO-250, SPF-250 Cable



REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV	DESCRIPTION		
	B	ECO-12298	AKRESOWSKI	AGANWANI

<p>Fairview Microwave® an INFINITI® brand</p> <p>Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678</p>		<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p> <p>SCALE: NONE</p> <p>SHEET: 1 OF 1</p>
<p>DESCRIPTION: N FEMALE LOW PIM CONNECTOR SOLDER ATTACHMENT FOR SPP-250-LLPL, SPO-250, SPF-250</p>		
SIZE: A	CAGE CODE: 3FKR5	ITEM NO.: TC-250-NF-LP
<p>UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES AND DIMENSIONS IN [] ARE MILLIMETERS.</p> <p>TOLERANCES:</p> <p>X = ±.2 [5] FRACTIONS ± 1/32</p> <p>XX = ±.02 [0.5] ANGLES ± 1°</p> <p>XXX = ±.005 [0.13] CABLE LENGTH TOLERANCES:</p> <p><12 [305] ±.60 [15.24] = +1 [25] / -0</p> <p>>12 [305] ±.60 [15.24] = +4 [102] / -0</p> <p>>40 [1024] ±.126 [3.048] = +4 [102] / -0</p> <p>>120 [3048] ±.300 [7.62] = +5% / -0</p> <p>ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.</p>		

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