

## N Male Low PIM Connector Solder Attachment for SPO-500, SPF-500 Cable

### Times Microwave Systems Connector Specification

Type N male connector with solder/solder attachment for Times' SPO-500 and SPF-500, part number TC-500-NM-LP, from Times Microwave offered by Fairview Microwave is in-stock and ships same day. This type N male connector operates up to a maximum frequency of 6 GHz and offers excellent VSWR of 1.25:1. The type N male connector also has low passive intermodulation (PIM) of -160 dBc.

Times Microwave's type N male connector TC-500-NM-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	Min	Typ	Max	Units
Frequency Range	DC		6	GHz
VSWR			1.25:1	
Insertion Loss			0.25	dB
Passive Intermodulation			-160	dBc
Operating Voltage (DC)			2,000	Vdc
Insulation Resistance	5,000			MOhms

### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Freq. Range	DC to 3	3 to 6				GHz
VSWR, Max	1.1:1	1.25:1				

Electrical Specification Notes:

Insertion Loss is  $0.1 * \sqrt{f(\text{GHz})}$

### Mechanical Specifications

#### Size

Length 1.24 in [31.5 mm]

Mating Torque 6 to 10 in-lbs [0.68 to 1.13 Nm]

### Material Specifications

Description	Material	Plating
Contact	Brass	Silver 200 µin
Insulation	PTFE	



### Configuration:

- N Male Connector
- 50 Ohms
- Straight Body Geometry
- SPO-500, SPF-500 Interface Type
- Solder/Solder Attachment
- Low PIM Design

### Features:

- Operating Frequency of 6 GHz Max.
- Excellent VSWR of 1.25:1
- 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)

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[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

Body	Brass	Tri-Metal 80 µin
Coupling Nut	Brass	Tri-Metal 80 µin
Gasket	Silicone	

**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

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

**Plotted and Other Data**

Notes:

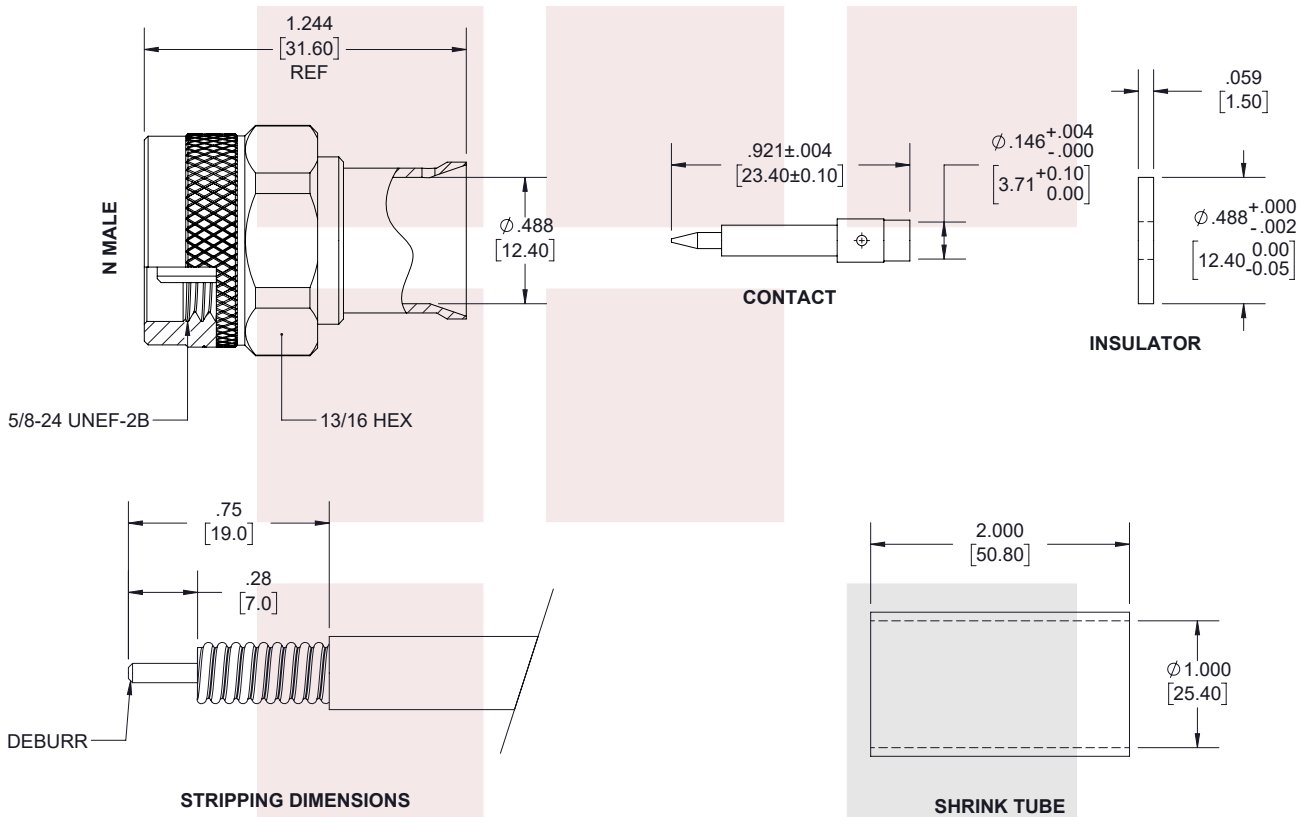
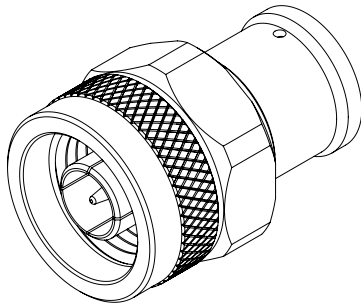
N Male Low PIM Connector Solder Attachment for SPO-500, SPF-500 Cable from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [N Male Low PIM Connector Solder Attachment for SPO-500, SPF-500 Cable TC-500-NM-LP](#)

URL: <https://www.fairviewmicrowave.com/n-male-spo-500-spf-500-connector-tc-500-nm-lp-p.aspx>

The information contained in 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 any liability arising out of the use of any part or documentation.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	6/2/2020	S.ELLIS



**NOTES:**

- CABLE ATTACHMENT:
  - OUTER: SOLDER.
  - INNER: SOLDER.

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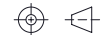
**SHRINK TUBE**

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

TOLERANCES: CABLE LENGTH (L) TOLERANCES:

.X = ±.2 [5.08]	FRACTIONS ± 1/32	L ≤ 12 [305] = +1 [25] / -0
.XX = ±.02 [.51]	ANGLES ± 1°	12 [305] < L ≤ 60 [1524] = +2 [51] / -0
.XXX = ±.005 [.13]		60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
		120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
		300 [7620] < L = +5%L / -0

THIRD-ANGLE PROJECTION



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SHEET 1 OF 1

SCALE N/A

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SIZE A	CAGE CODE 3FKR5	DRAWN BY K.DANG	ITEM NO. TC-500-NM-LP	REV A
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