



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

### RF Connectors Technical Data Sheet



TC-500-NM-LP

### Times Microwave Systems Connector Specification

#### Configuration

- N Male Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: SPO-500, SPP-500-LLPL, SPF-500
- Low PIM Design

#### Features

- Max. Operating Frequency 6 GHz
- Excellent VSWR of 1.25:1
- PIM levels lower than -160 dBc
- Silver Plated Brass Contact
- 200  $\mu$ m contact plating

#### Applications

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

#### Description

Times Microwave's TC-500-NM-LP type N male connector offered by Pasternack with solder/solder attachment for Times' SPO-500, SPP-500-LLPL and SPF-500 is part of our full line of RF components available for same-day shipping. Times Microwave's type N male connector operates up to a maximum frequency of 6 GHz and offers excellent VSWR of 1.25:1. The Times type N male connector also has low passive intermodulation of -160 dBc.

Times Microwave's type N male connector TC-500-NM-LP datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right connector for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same-day.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	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

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male Low PIM Connector Solder Attachment for SPF-500, SPO-500, SPP-500-LLPL TC-500-NM-LP](#)



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TC-500-NM-LP

### Performance by Frequency

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

Electrical Specification Notes:  
Insertion Loss is  $0.1 \cdot \sqrt{FGHz}$

### Mechanical Specifications

#### Size

Length	1.24 in [31.5 mm]
Mating Cycles	500 Cycles
Mating Torque	6 to 10 in-lbs [0.68 to 1.13 Nm]
Cable Retention Force	179.85 lbs [81.58 kg]

### Material Specifications

Description	Material	Plating
Contact	Brass	Silver 200 $\mu$ m
Insulation	PTFE	
Body	Brass	Tri-Metal 80 $\mu$ m
Coupling Nut	Brass	Tri-Metal 80 $\mu$ m
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:

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N Male Low PIM Connector Solder Attachment for SPF-500, SPO-500, SPP-500-LLPL from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

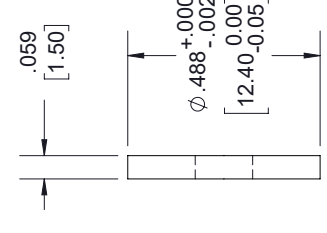
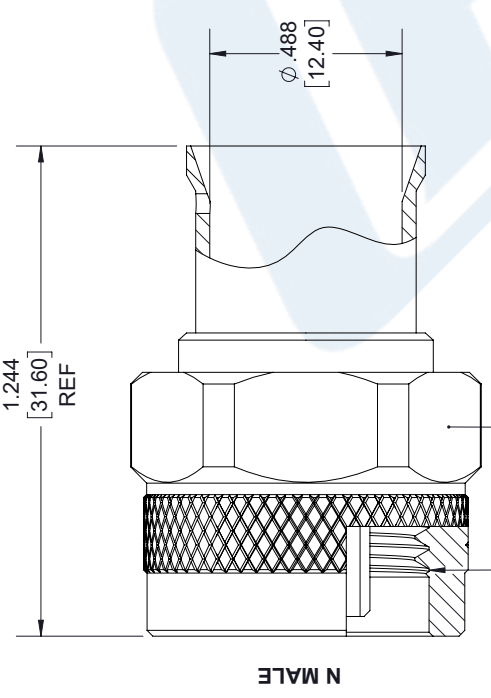
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male Low PIM Connector Solder Attachment for SPF-500, SPO-500, SPP-500-LLPL TC-500-NM-LP](https://www.pasternack.com/n-male-spf-500-spo-500-spp-500-llpl-connector-tc-500-nm-lp-p.aspx)

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

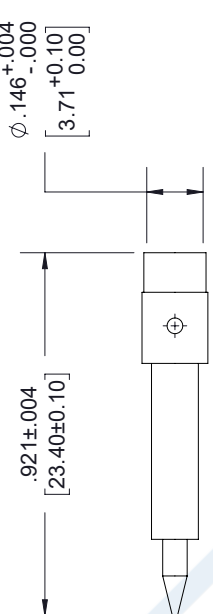
The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

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

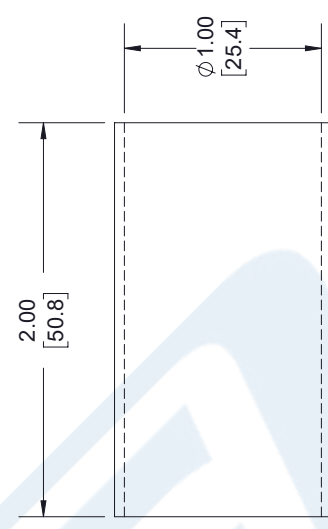
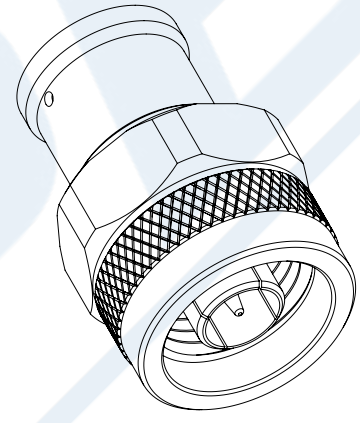
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	6/2/2020	S. SELLIS



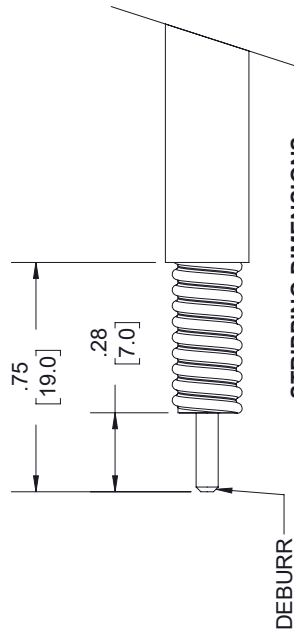
**INSULATOR**



**CONTACT**



**SHRINK TUBE**



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

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

**TOLERANCES:**

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

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

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SCALE N/A

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SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	K. DANG	TC-500-NM-LP

REV A

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