



## Plenum N Male to SMA Female Low PIM Cable 48 Inch Length Using SPP-250-LLPL Coax , LF Solder

### RF Cable Assemblies Technical Data Sheet

PE3C5881-48

#### Configuration

- Connector 1: N Male
- Connector 2: SMA Female
- Cable Type: SPP-250-LLPL

#### Features

- Max Frequency 5.8 GHz
- Low PIM: -160 dBc Max
- Shielding Effectivity > 100 dB
- 76% Phase Velocity
- FEP Jacket
- 100% Tested with PIM Test Results Marked on Cable
- UL910 Plenum Rated Cable
- Lightweight and Extremely Flexible
- Low Loss with Excellent VSWR
- IP67 (when mated)

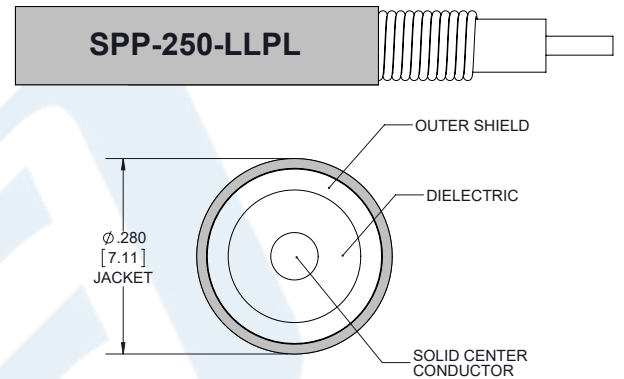
#### Applications

- General Purpose
- Laboratory Use
- Low PIM Applications
- Distributed Antenna Systems (DAS)
- Plenum Installations
- Multi-Carrier Communication Systems
- PIM Testing

#### Description

Pasternack's PE3C5881-48 type N male to SMA female 48 inch cable using SPP-250-LLPL coax is part of our full line of RF components available for same-day shipping. Pasternack's corrugated RF cable assemblies are ideal for applications where durability and high power are needed. This Pasternack type N to SMA cable assembly has a male to female gender configuration with 50 ohm corrugated SPP-250-LLPL coax. The PE3C5881-48 type N male to SMA female cable assembly operates to 5.8 GHz. Our low PIM design also offers excellent passive intermodulation performance with PIM levels better than -160 dBc.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other available RF cable assembly value added services include connector orientation or clocking, heat shrink booting and custom labeling. RF testing can also be performed to document the electrical performance of your cable assembly.



Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Plenum N Male to SMA Female Low PIM Cable 48 Inch Length Using SPP-250-LLPL Coax , LF Solder PE3C5881-48](#)



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**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
VSWR			1.4:1	
Velocity of Propagation		76		%
RF Shielding	100			dB
Passive Intermodulation			-160	dBc
Capacitance		27 [88.58]		pF/ft [pF/m]
Inductance		0.067 [0.22]		uH/ft [uH/m]
DC Resistance Inner Conductor		3 [9.84]		$\Omega$ /1000ft [ $\Omega$ /Km]

**Specifications by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.45	0.7	1	2.5	5.8	GHz
Insertion Loss (Max.)	0.21	0.26	0.31	0.51	0.79	dB

**Electrical Specification Notes:**

The insertion loss data above is based on the performance specifications of the coax cable used in this assembly. The insertion loss includes an estimated insertion loss of 0.04\*SQRT(FGHz) dB maximum per connector.

**Mechanical Specifications**

**Cable Assembly**

Length\* 48 in [121.92 cm]

**Cable**

Cable Type SPP-250-LLPL  
 Impedance 50 Ohms  
 Inner Conductor Type Solid  
 Inner Conductor Material and Plating Copper  
 Dielectric Type PTFE  
 Number of Shields 1  
 Outer Conductor Material and Plating Copper  
 Jacket Material FEP, Blue  
 Jacket Diameter 0.28 in [7.11 mm]  
  
 One Time Minimum Bend Radius 1.25 in [31.75 mm]  
 Bending Moment 0.8 lbs-ft [1.08 N-m]

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**Connectors**

Description	Connector 1	Connector 2
Type	N Male	SMA Female
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Phosphor Bronze, Silver	Beryllium Copper, Silver
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Brass, Tri-Metal
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Material and Plating	Brass, Tri-Metal	

Mechanical Specification Notes:

\*All cable assemblies have a length tolerance of 1.5% or  $\pm 3/8$ ", whichever is greater.

**Environmental Specifications**

**Temperature**

Operating Range -55 to +165 deg C

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

**Plotted and Other Data**

Notes:

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Typical Performance Data



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**How to Order**

Part Number Configuration:

**PE3C5881**

- **xx**

**uu**

Unit of Measure:  
cm = Centimeters  
<blank> = Inches  
Length  
Base Number

Example: PE3C5881-12 = 12 inches long cable  
PE3C5881-100cm = 100 cm long cable

Plenum N Male to SMA Female Low PIM Cable 48 Inch Length Using SPP-250-LLPL Coax , LF Solder 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.

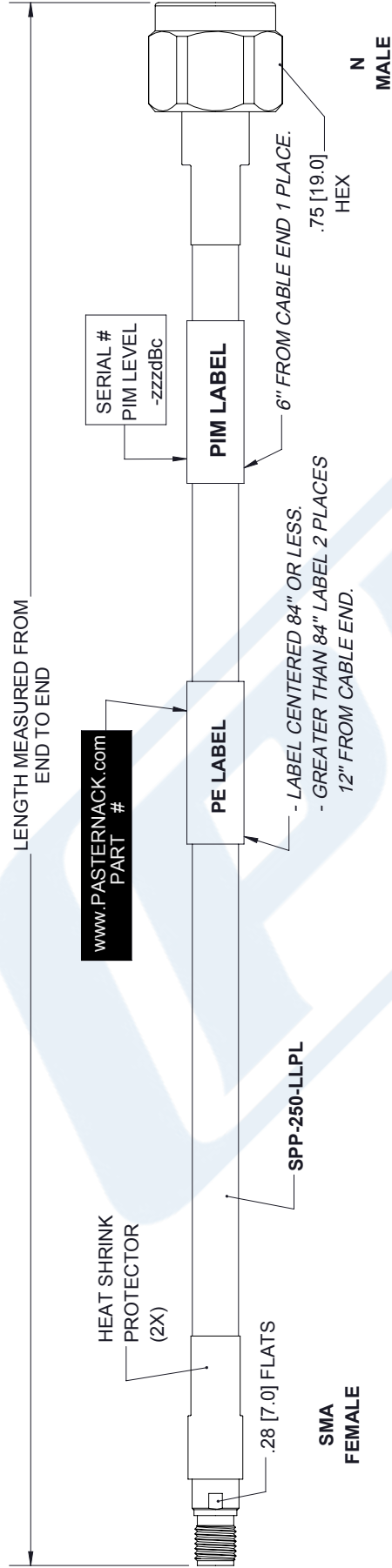
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Plenum N Male to SMA Female Low PIM Cable 48 Inch Length Using SPP-250-LLPL Coax , LF Solder PE3C5881-48](https://www.pasternack.com/n-male-sma-female-spp250llpl-cable-assembly-pe3c5881-48-p.aspx)

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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.

# PE3C5881-48 CAD Drawing

## Plenum N Male to SMA Female Low PIM Cable 48 Inch Length Using SPP-250-LLPL Coax , LF Solder



SERIAL #  
PIM LEVEL  
-zzzdBc

www.pasternack.com  
PART #

STANDARD TOLERANCES	
.X	±0.2
.XX	±0.01
.XXX	±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

 <p><b>PASTERNAK</b> THE ENGINEER'S RF SOURCE</p> <p>Pasternack Enterprises, Inc. P.O. Box 16759   Irvine   CA   92623</p> <p>Phone: (949) 261-1920   Fax: (949) 261-7451 Website: www.pasternack.com   E-Mail: sales@pasternack.com</p>		<p>DWG TITLE</p> <p>PE3C5881</p>	<p>NOTES:</p> <ol style="list-style-type: none"> <li>UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.</li> <li>ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME</li> <li>DIMENSIONS ARE IN INCHES [mm].</li> </ol>		
		<p>CAD FILE</p> <p>12/26/18</p>	<p>SCALE</p> <p>N/A</p>	<p>SIZE</p> <p>A</p>	<p>CN2379</p>
		<p>CAGE CODE</p> <p>53919</p>			