



Plenum N Male to SMA Female Low PIM Cable 60 Inch  
Length Using SPP-250-LLPL Coax , LF Solder

RF Cable Assemblies Technical Data Sheet

PE3C5881-60

### 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 PE3C5881-60 type N male to SMA female 60 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 PE3C5881-60 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 60 Inch Length Using SPP-250-LLPL Coax , LF Solder PE3C5881-60](#)



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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]     |         | Ω/1000ft [Ω/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.) | 0.25 | 0.31 | 0.37 | 0.6 | 0.94 | 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\* 60 in [152.4 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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## Plenum N Male to SMA Female Low PIM Cable 60 Inch Length Using SPP-250-LLPL Coax , LF Solder

### RF Cable Assemblies Technical Data Sheet

PE3C5881-60

#### 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

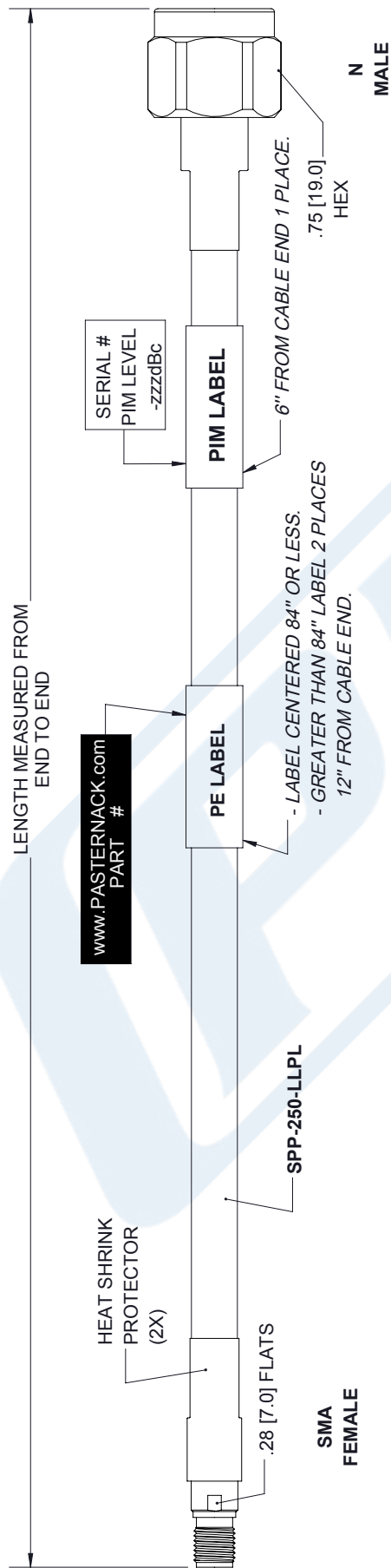
Plenum N Male to SMA Female Low PIM Cable 60 Inch Length Using SPP-250-LLPL Coax , LF Solder from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in 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 60 Inch Length Using SPP-250-LLPL Coax , LF Solder PE3C5881-60](https://www.pasternack.com/n-male-sma-female-spp250llpl-cable-assembly-pe3c5881-60-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.

PE3C5881-60 CAD Drawing  
Plenum N Male to SMA Female Low PIM Cable 60 Inch  
Length Using SPP-250-LLPL Coax , LF Solder



STANDARD TOLERANCES

.X ±0.2  
.XX ±0.01  
.XXX ±0.005

\*STANDARD TOLERANCES APPLY  
ONLY TO DIMENSIONS IN INCHES



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DWG TITLE

PE3C5881

NOTES:  
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.  
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME  
3. DIMENSIONS ARE IN INCHES [mm].

CAGE CODE 53919

CAD FILE 12/26/18

SCALE N/A

SIZE A

CN2379