



Plenum SMA Male to SMA Male Right Angle Low PIM Cable  
50 cm Length Using SPP-250-LLPL Coax , LF Solder

RF Cable Assemblies Technical Data Sheet

PE3C5894-50CM

### Configuration

- Connector 1: SMA Male
- Connector 2: SMA Male Right Angle
- Cable Type: SPP-250-LLPL

### Features

- Max Frequency 5.8 GHz
- Low PIM: -155 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 PE3C5894-50CM SMA male to SMA male right angle 50 cm 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 SMA to SMA cable assembly has a male to male gender configuration with 50 ohm corrugated SPP-250-LLPL coax. The PE3C5894-50CM SMA male to SMA male cable assembly operates to 5.8 GHz. Our low PIM design also offers excellent passive intermodulation performance with PIM levels better than -155 dBc. The right angle SMA interface on the SPP-250-LLPL cable allows for easier connections in tight spaces.

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 SMA Male to SMA Male Right Angle Low PIM Cable 50 cm Length Using SPP-250-LLPL Coax , LF Solder PE3C5894-50CM](#)



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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			-155	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]		Ohms/1000ft [Ohms/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.)	0.12	0.15	0.18	0.29	0.44	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\* 19.685 in [500 mm]

#### 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]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Plenum SMA Male to SMA Male Right Angle Low PIM Cable 50 cm Length Using SPP-250-LLPL Coax , LF Solder PE3C5894-50CM](#)



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Bending Moment 0.8 lbs-ft [1.08 N-m]

**Connectors**

Description	Connector 1	Connector 2
Type	SMA Male	SMA Male Right Angle
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Brass, Gold
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Material and Plating	Brass, Tri-Metal	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:

**PE3C5894**

- **xx**

**uu**

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

Example: PE3C5894-12 = 12 inches long cable  
PE3C5894-100cm = 100 cm long cable

Plenum SMA Male to SMA Male Right Angle Low PIM Cable 50 cm 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.

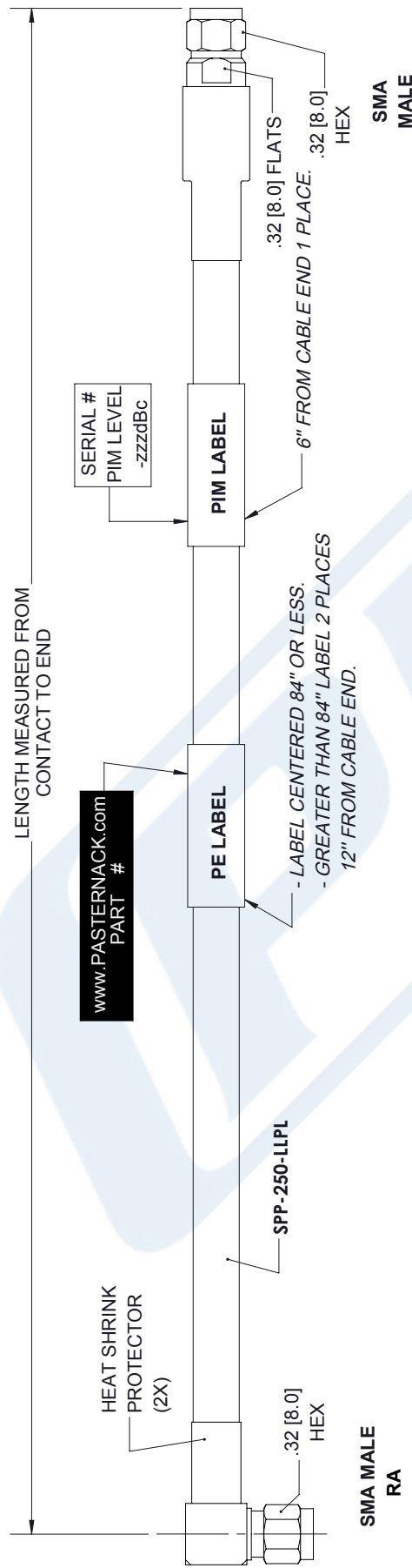
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Plenum SMA Male to SMA Male Right Angle Low PIM Cable 50 cm Length Using SPP-250-LLPL Coax , LF Solder PE3C5894-50CM](https://www.pasternack.com/sma-male-sma-male-spp250llpl-cable-assembly-pe3c5894-50cm-p.aspx)

URL: <https://www.pasternack.com/sma-male-sma-male-spp250llpl-cable-assembly-pe3c5894-50cm-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.

PE3C5894-50CM CAD Drawing

Plenum SMA Male to SMA Male Right Angle Low PIM Cable  
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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  
PE3C5894

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 12/2618

SCALE N/A

SIZE A

CN2379