

Plenum SMA Female to SMA Female Low PIM Cable  
50 CM Length Using SPP-250-LLPL Coax Low Profile



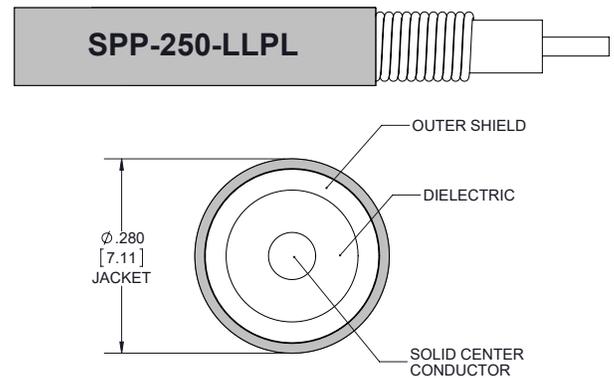
**PE3W09126-50CM**

**Configuration**

- Connector 1: SMA Female
- Connector 2: SMA Female
- Cable Type: SPP-250-LLPL
- Coax Flex Type: Corrugated

**Features**

- Max Frequency 6 GHz
- Low PIM: -160 dBc Max
- Shielding Effectivity > 100 dB
- 76% Phase Velocity
- FEP Jacket



**Applications**

- General Purpose
- Laboratory Use
- Low PIM Applications

**Description**

Pasternack's PE3W09126-50CM SMA female to SMA female 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 female to female gender configuration with 50 ohm corrugated SPP-250-LLPL coax. The PE3W09126-50CM SMA female to SMA female cable assembly operates to 6 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.

**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
VSWR			1.4:1	
Velocity of Propagation		76		%
RF Shielding	100			dB
Passive Intermodulation IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz			-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]		Ohms/1000ft [Ohms/Km]

**Specifications by Frequency**

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Part Number	Length	Description	F1	F2	F3	F4	Units	Weight (lbs)
			Frequency	500	1000	2500	6000	
PE3W09126	Custom Lengths Available	Insertion Loss (Typ.)	0.039	0.054	0.093	0.148	dB/ft	
			0.13	0.18	0.31	0.49	dB/m	
PE3W09126-12	12 In	Insertion Loss (Typ.)	0.24	0.26	0.3	0.35	dB	0.106
PE3W09126-24	24 In	Insertion Loss (Typ.)	0.28	0.31	0.39	0.5	dB	0.177
PE3W09126-36	36 In	Insertion Loss (Typ.)	0.32	0.37	0.48	0.65	dB	0.247
PE3W09126-60	60 In	Insertion Loss (Typ.)	0.4	0.47	0.67	0.94	dB	0.387
PE3W09126-50CM	50 CM	Insertion Loss (Typ.)	0.27	0.29	0.36	0.45	dB	0.151

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1: 0.1 dB  
 Loss due to Connector 2: 0.1 dB  
 Base Weight: 0.106 pounds  
 Additional Weight per Inch: 0.00584 pounds

**Mechanical Specifications**

**Cable Assembly**

Length 19.685 in [500 mm]  
 Width/Diameter .5 in [12.7 mm]  
 Weight 0.151 lbs [68.49 g]

**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 1 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	SMA Female	SMA Female
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Beryllium Copper, Silver	Beryllium Copper, Silver
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal

**Environmental Specifications**

Operating Range Temperature -55 to +165 deg C

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

**Plotted and Other Data**

Notes:

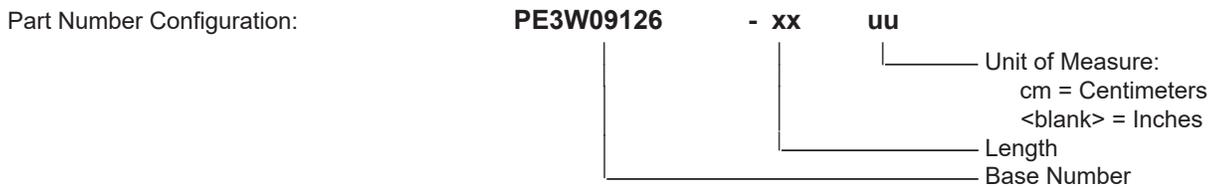
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**PE3W09126-50CM**

**Typical Performance Data**

**How to Order**



Example:    PE3W09126-12 = 12 inches long cable  
              PE3W09126-100cm = 100 cm long cable

Plenum SMA Female to SMA Female Low PIM Cable 50 CM Length Using SPP-250-LLPL Coax Low Profile 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.

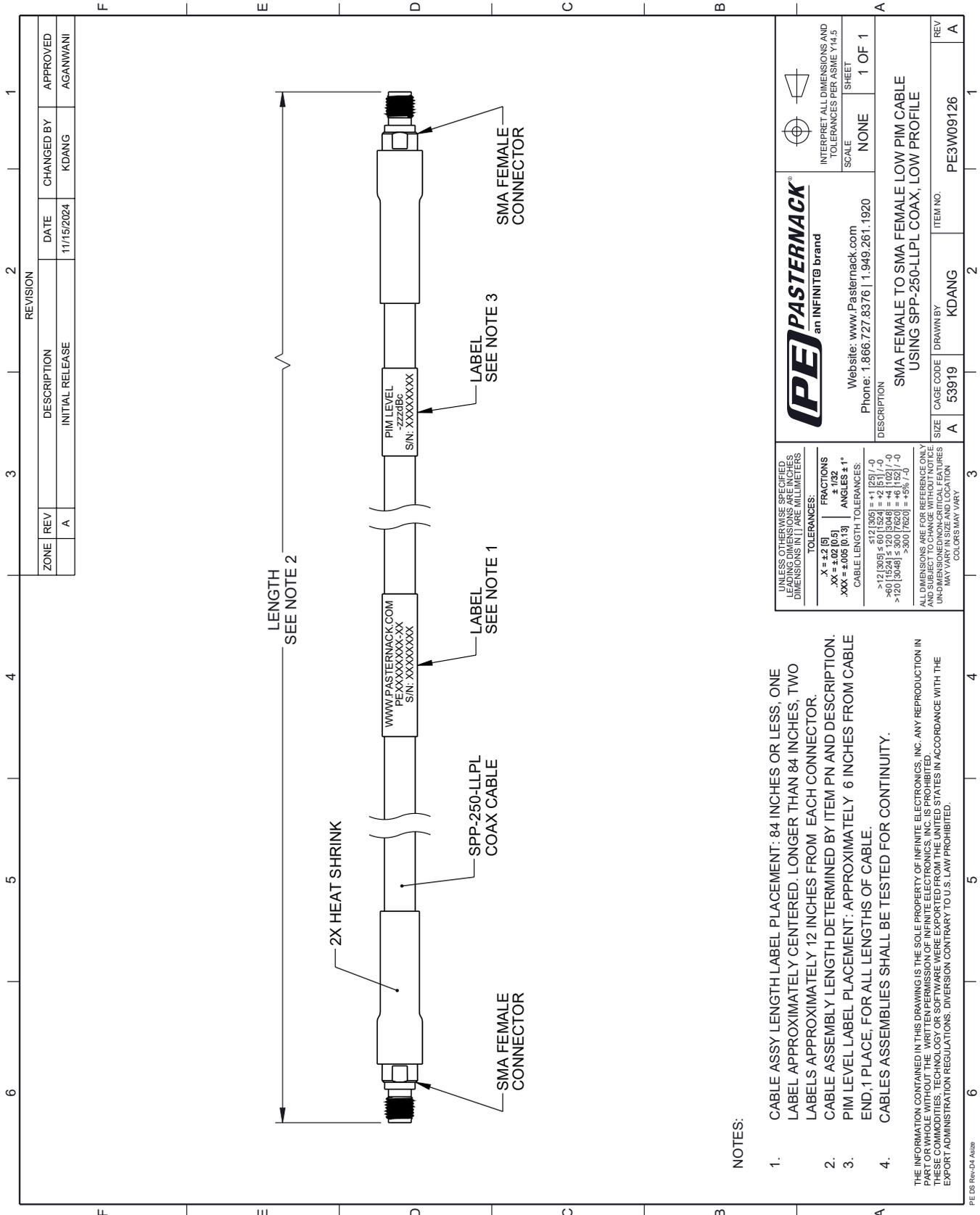
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Plenum SMA Female to SMA Female Low PIM Cable 50 CM Length Using SPP-250-LLPL Coax Low Profile PE3W09126-50CM](https://www.pasternack.com/plenum-sma-female-to-sma-female-low-pim-cable-50-cm-length-using-spp-250-llpl-pe3w09126-50cm)

URL: <https://www.pasternack.com/plenum-sma-female-to-sma-female-low-pim-cable-50-cm-length-using-spp-250-llpl-pe3w09126-50cm-p.aspx>

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# PE3W09126-50CM CAD Drawing

Plenum SMA Female to SMA Female Low PIM Cable 50 CM Length Using SPP-250-LLPL Coax Low Profile



ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	11/15/2024	KDANG	AGANWANI

		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE NONE SHEET 1 OF 1
Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a> Phone: 1.866.727.8376   1.949.261.1920		
DESCRIPTION SMA FEMALE TO SMA FEMALE LOW PIM CABLE USING SPP-250-LLPL COAX, LOW PROFILE		
SIZE	CAGE CODE	ITEM NO.
A	53919	PE3W09126
DRAWN BY		REV
KDANG		A

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

TOLERANCES:  
 .X = ±.2 [5]  
 .XX = ±.02 [0.5]  
 .XXX = ±.005 [0.13]

FRACTIONS ± 1/32  
 ANGLES ± 1°

CABLE LENGTH TOLERANCES:  
 ≤ 12 [305] = ±.1 [2.5] / -0  
 > 12 [305] ≤ 60 [1524] = ±.2 [5] / -0  
 > 60 [1524] ≤ 120 [3048] = ±.4 [102] / -0  
 > 120 [3048] ≤ 300 [7620] = ±.8 [20] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY UNLESS OTHERWISE SPECIFIED  
 UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION  
 COLORS MAY VARY

NOTES:  
 1. CABLE ASSY LENGTH LABEL PLACEMENT: 84 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 84 INCHES, TWO LABELS APPROXIMATELY 12 INCHES FROM EACH CONNECTOR.  
 2. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.  
 3. PIM LEVEL LABEL PLACEMENT: APPROXIMATELY 6 INCHES FROM CABLE END, 1 PLACE, FOR ALL LENGTHS OF CABLE.  
 4. CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

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