

## Plenum SMA Female to SMA Female Low PIM Cable 12 Inch Length Using SPP-250-LLPL Coax



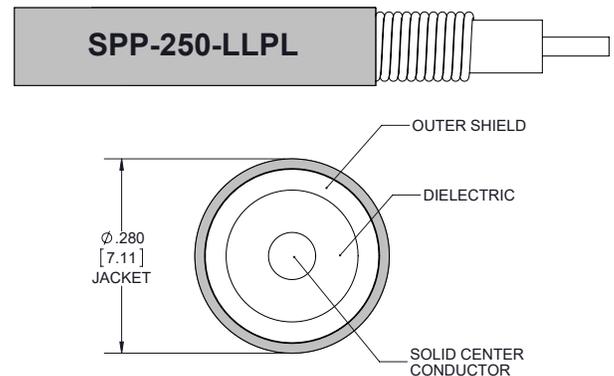
### PE3W17229-12

#### 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: -155 dBc Max
- Shielding Effectivity > 100 dB
- 76% Phase Velocity
- FEP Jacket



#### Applications

- General Purpose
- Laboratory Use
- Low PIM Applications

#### Description

Pasternack's PE3W17229-12 SMA female to SMA female 12 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 SMA to SMA cable assembly has a female to female gender configuration with 50 ohm corrugated SPP-250-LLPL coax. The PE3W17229-12 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 -155 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			-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

Plenum SMA Female to SMA Female Low PIM Cable  
12 Inch Length Using SPP-250-LLPL Coax



**PE3W17229-12**

Part Number	Length	Description	F1	F2	F3	F4	Units	Weight (lbs)
			Frequency	500	1000	2500	6000	
PE3W17229	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	
PE3W17229-12	12 In	Insertion Loss (Typ.)	0.24	0.26	0.3	0.35	dB	0.11
PE3W17229-24	24 In	Insertion Loss (Typ.)	0.28	0.31	0.39	0.5	dB	0.181
PE3W17229-36	36 In	Insertion Loss (Typ.)	0.32	0.37	0.48	0.65	dB	0.251
PE3W17229-60	60 In	Insertion Loss (Typ.)	0.4	0.47	0.67	0.94	dB	0.391
PE3W17229-50CM	50 CM	Insertion Loss (Typ.)	0.27	0.29	0.36	0.45	dB	0.155

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: 0.11 pounds  
 Additional Weight per Inch: 0.00584 pounds

**Mechanical Specifications**

**Cable Assembly**

Length 12 in [304.8 mm]  
 Width/Diameter .5 in [12.7 mm]  
 Weight 0.11 lbs [49.9 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]

Plenum SMA Female to SMA Female Low PIM Cable  
12 Inch Length Using SPP-250-LLPL Coax



**PE3W17229-12**

**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 -40 to +155 deg C

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

**Plotted and Other Data**

Notes:

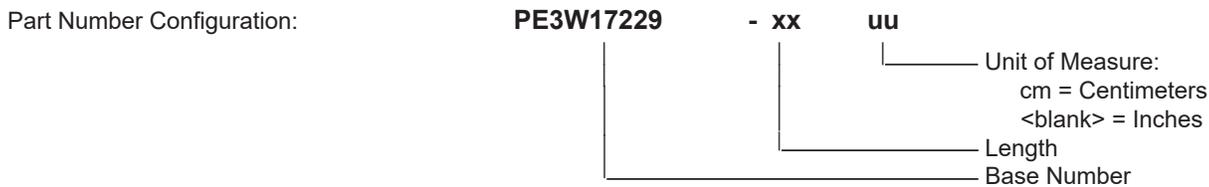
Plenum SMA Female to SMA Female Low PIM Cable  
12 Inch Length Using SPP-250-LLPL Coax



**PE3W17229-12**

**Typical Performance Data**

**How to Order**



Example:    PE3W17229-12 = 12 inches long cable  
              PE3W17229-100cm = 100 cm long cable

Plenum SMA Female to SMA Female Low PIM Cable 12 Inch Length Using SPP-250-LLPL Coax 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.

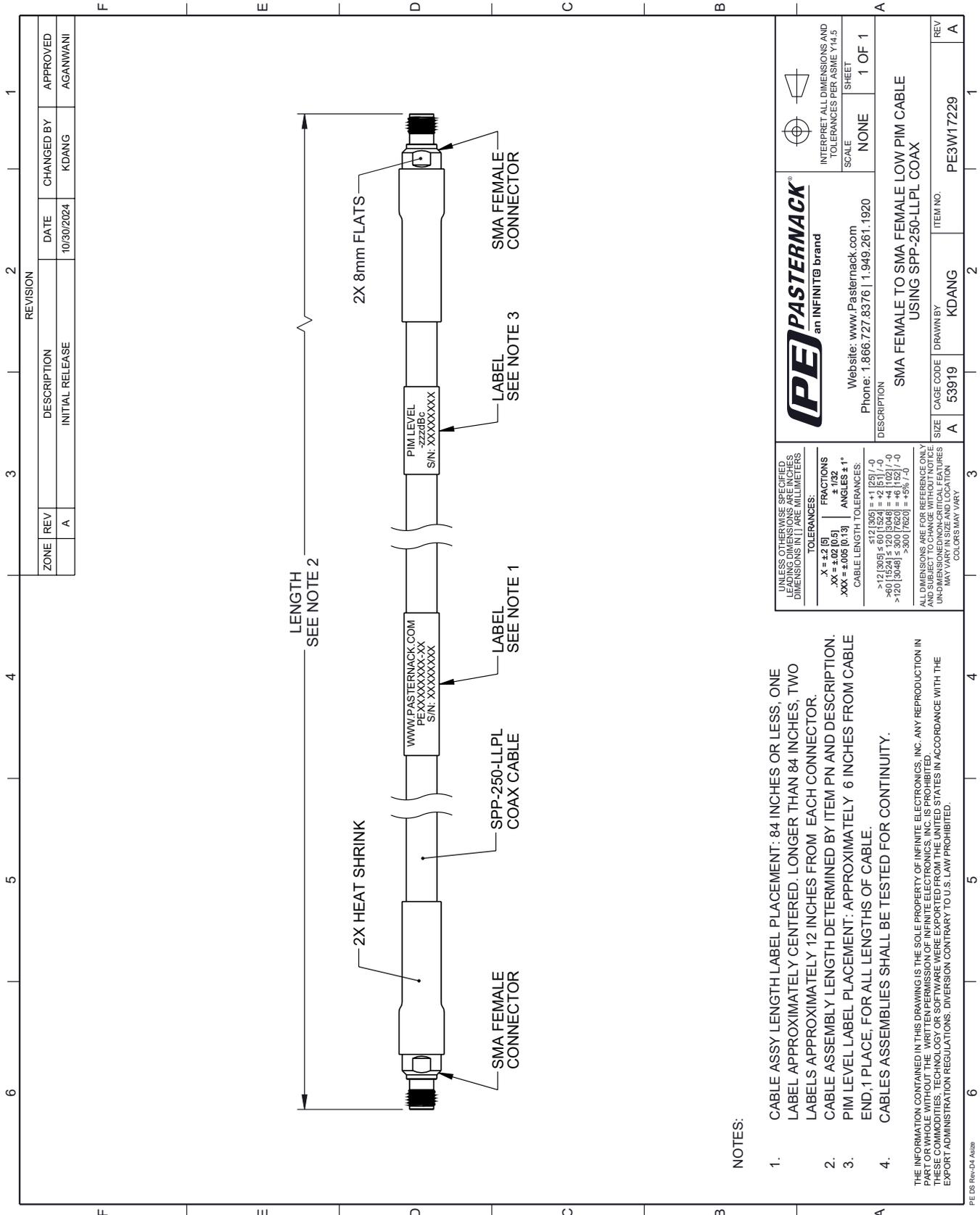
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Plenum SMA Female to SMA Female Low PIM Cable 12 Inch Length Using SPP-250-LLPL Coax PE3W17229-12](https://www.pasternack.com/plenum-sma-female-to-sma-female-low-pim-cable-12-inch-length-using-spp-250-llpl-pe3w17229-12-p.aspx)

URL: <https://www.pasternack.com/plenum-sma-female-to-sma-female-low-pim-cable-12-inch-length-using-spp-250-llpl-pe3w17229-12-p.aspx>

The information contained within 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 impliment improvements. Pasternack Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

# PE3W17229-12 CAD Drawing

Plenum SMA Female to SMA Female Low PIM Cable 12 Inch Length Using SPP-250-LLPL Coax



**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.

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

<p>UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE MILLIMETERS.</p> <p><b>TOLERANCES:</b></p> <p>.X = ±.2 [5]                  .XX = ±.02 [0.5]                  .XXX = ±.005 [0.13]</p> <p><b>FRACTIONS</b>                  ± 1/32  <b>ANGLES</b> ± 1°</p> <p><b>CABLE LENGTH TOLERANCES:</b></p> <p>&lt;math&gt;\le 12 [305]&lt;/math&gt; ±.60 [1524] = +.1 [25] / -0                  &lt;math&gt;&gt; 12 [305]&lt;/math&gt; ±.60 [1524] = +.2 [51] / -0                  &lt;math&gt;\le 60 [1524]&lt;/math&gt; ±.120 [3048] = +.4 [1027] / -0                  &lt;math&gt;&gt; 60 [1524]&lt;/math&gt; ±.120 [3048] = +.5% [12.7] / -0                  &lt;math&gt;&gt; 300 [7620]&lt;/math&gt; ±.5% [12.7] / -0</p> <p>ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.</p>		<p><b>PE PASTERNAK</b>                  an INFINITB brand</p> <p>Website: www.Pasternack.com                  Phone: 1.866.727.8376   1.949.261.1920</p>	<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p> <p>SCALE: NONE                  SHEET: 1 OF 1</p>
<p>DESCRIPTION: SMA FEMALE TO SMA FEMALE LOW PIM CABLE USING SPP-250-LLPL COAX</p>		<p>ITEM NO.: PE3W17229</p>	
<p>SIZE: A</p>	<p>CAGE CODE: 53919</p>	<p>REV: A</p>	
<p>DRAWN BY: KDANG</p>	<p>CHANGED BY: KDANG</p>	<p>APPROVED: AGANWANI</p>	
<p>DATE: 10/30/2024</p>	<p>INITIAL RELEASE</p>	<p>REVISION</p>	