

## Plenum 2.2-5 Male to SMA Male Low PIM Cable 36 Inch Length Using SPP-250-LLPL Coax

### PE3C9931-36



#### Configuration

- Connector 1: 2.2-5 Male
- Connector 2: SMA Male
- 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 PE3C9931-36 2.2-5 male to SMA male 36 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 2.2-5 to SMA cable assembly has a male to male gender configuration with 50 ohm corrugated SPP-250-LLPL coax. The PE3C9931-36 2.2-5 male to SMA male 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			-155	dBc
IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz				
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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### PE3C9931-36

Part Number	Length	Description	F1	F2	F3	F4	Units	Weight (lbs)
		Frequency	500	1000	2500	6000	MHz	
PE3C9931	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	
PE3C9931-12	12 In	Insertion Loss (Typ.)	0.24	0.26	0.3	0.35	dB	0.14
PE3C9931-24	24 In	Insertion Loss (Typ.)	0.28	0.31	0.39	0.5	dB	0.211
PE3C9931-36	36 In	Insertion Loss (Typ.)	0.32	0.37	0.48	0.65	dB	0.281
PE3C9931-60	60 In	Insertion Loss (Typ.)	0.4	0.47	0.67	0.94	dB	0.421
PE3C9931-50CM	50 CM	Insertion Loss (Typ.)	0.27	0.29	0.36	0.45	dB	0.185

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:	0.14 pounds
Additional Weight per Inch:	0.00584 pounds

### Mechanical Specifications

#### Cable Assembly

Length	36 in [914.4 mm]
Width/Diameter	.5 in [12.7 mm]
Weight	0.281 lbs [127.46 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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**PE3C9931-36**

**Connectors**

Description	Connector 1	Connector 2
Type	2.2-5 Male	SMA Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Silver	Brass, Silver
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

**Environmental Specifications**

Operating Range Temperature -40 to +155 deg C

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

**Plotted and Other Data**

Notes:

Plenum 2.2-5 Male to SMA Male Low PIM Cable  
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**PE3C9931-36**

**Typical Performance Data**

**How to Order**

Part Number Configuration:

**PE3C9931**

**- xx**

**uu**

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3C9931-12 = 12 inches long cable  
PE3C9931-100cm = 100 cm long cable

Plenum 2.2-5 Male to SMA Male Low PIM Cable 36 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.

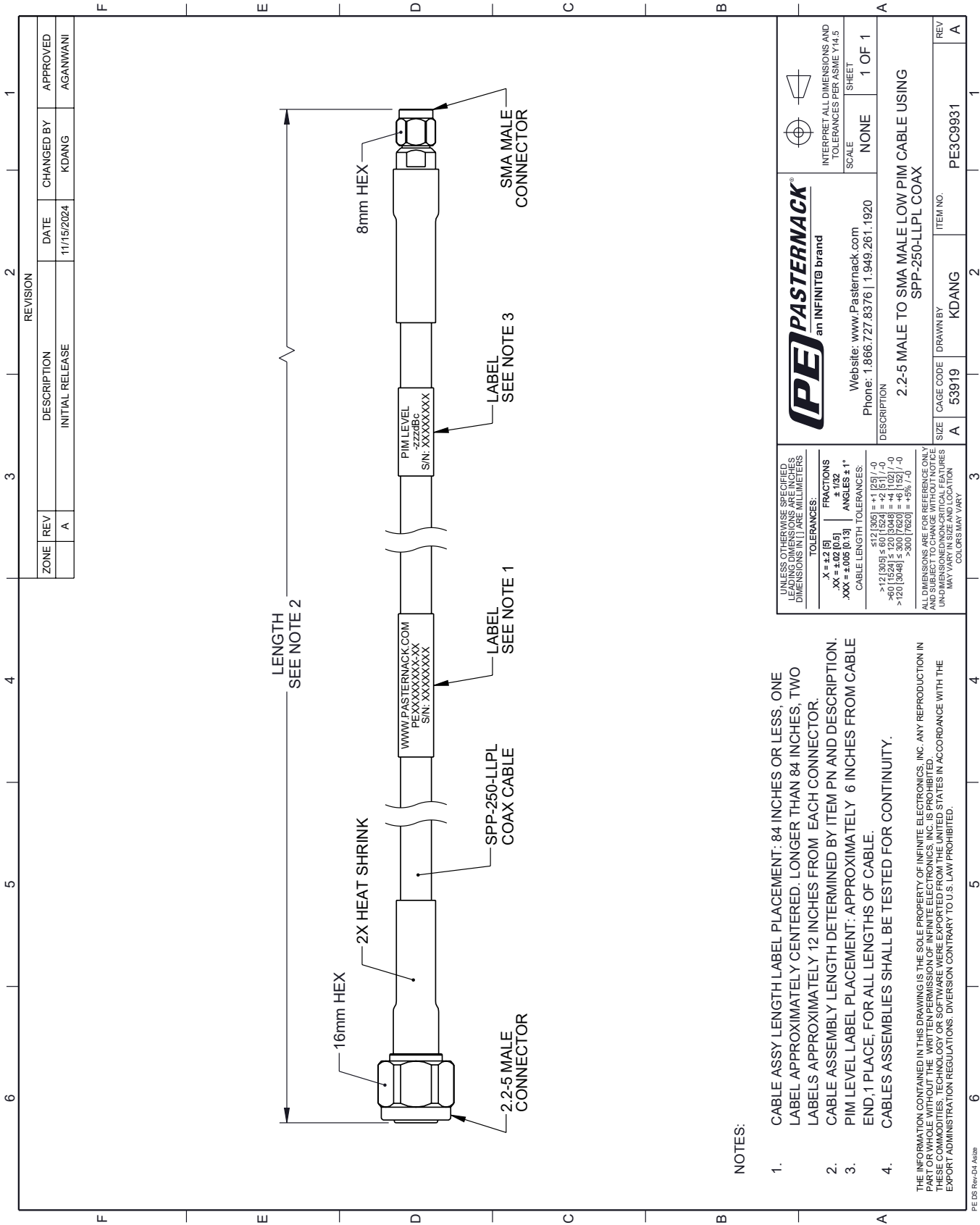
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Plenum 2.2-5 Male to SMA Male Low PIM Cable 36 Inch Length Using SPP-250-LLPL Coax PE3C9931-36](#)

URL: <https://www.pasternack.com/plenum-2.2-5-male-to-sma-male-low-pim-cable-36-inch-length-using-spp-250-llpl-pe3c9931-36-p.aspx>

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PE3C9931-36 CAD Drawing

Plenum 2.2-5 Male to SMA Male Low PIM Cable 36 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.

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

TOLERANCES:

.X = ±.2 [5]	FRACTIONS ± 1/32
.XX = ±.02 [0.5]	ANGLES ± 1°
.XXX = ±.005 [0.13]	

CABLE LENGTH TOLERANCES:

≤ 12 [305]	±.12 [3.05]
> 12 [305] ≤ 60 [1524]	±.25 [6.35]
> 60 [1524] ≤ 120 [3048]	±.5 [12.7]
> 120 [3048]	±.75 [19.05]

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Phone: 1.866.727.8376 | 1.949.261.1920

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE  
SHEET: 1 OF 1

DESCRIPTION: 2.2-5 MALE TO SMA MALE LOW PIM CABLE USING SPP-250-LLPL COAX

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	KDANG	PE3C9931

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