

Plenum 2.2-5 Male to SMA Male Low PIM Cable 24 Inch Length Using SPP-250-LLPL Coax



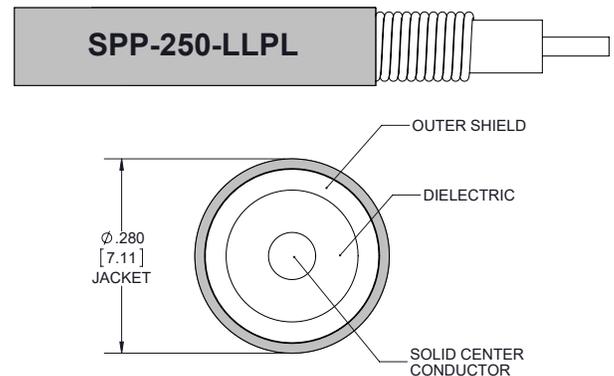
PE3C9931-24

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 PE3C9931-24 2.2-5 male to SMA male 24 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 PE3C9931-24 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 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

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PE3C9931-24

Part Number	Length	Description	F1	F2	F3	F4	Units	Weight (lbs)
			Frequency	500	1000	2500	6000	
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 24 in [609.6 mm]
 Width/Diameter .5 in [12.7 mm]
 Weight 0.211 lbs [95.71 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	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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PE3C9931-24

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 24 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.

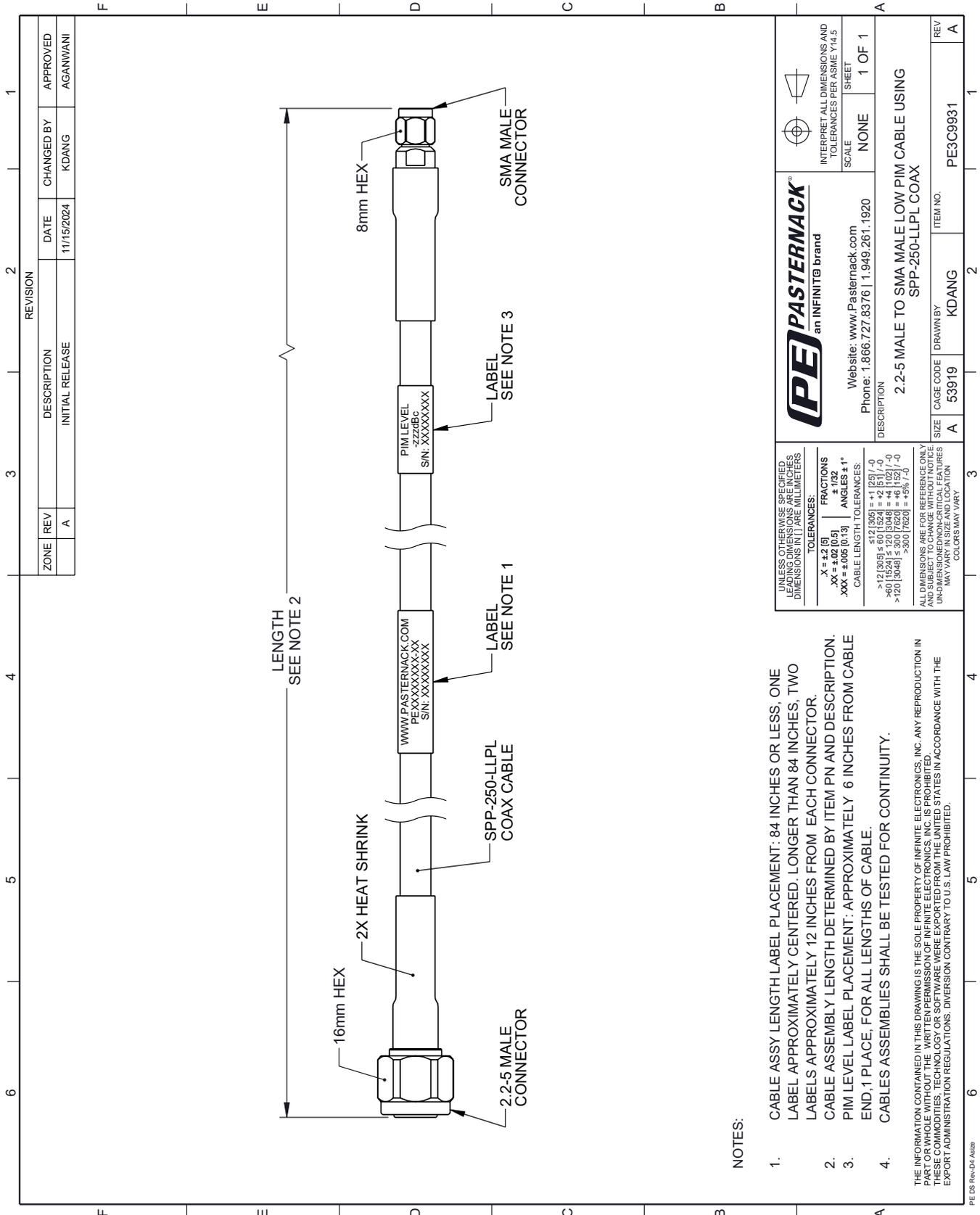
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Plenum 2.2-5 Male to SMA Male Low PIM Cable 24 Inch Length Using SPP-250-LLPL Coax PE3C9931-24](https://www.pasternack.com/plenum-2.2-5-male-to-sma-male-low-pim-cable-24-inch-length-using-spp-250-llpl-pe3c9931-24-p.aspx)

URL: <https://www.pasternack.com/plenum-2.2-5-male-to-sma-male-low-pim-cable-24-inch-length-using-spp-250-llpl-pe3c9931-24-p.aspx>

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PE3C9931-24 CAD Drawing

Plenum 2.2-5 Male to SMA Male Low PIM Cable 24 Inch Length Using SPP-250-LLPL Coax



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

PASTERNAK an INFINITB brand		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1
Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920		
DESCRIPTION: 2.2-5 MALE TO SMA MALE LOW PIM CABLE USING SPP-250-LLPL COAX		
SIZE	CAGE CODE	ITEM NO.
A	53919	PE3C9931
REV	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] ±.60 [1524] = +2 [51] / -0
 >12 [305] ±.60 [1524] = +2 [51] / -0
 >40 [1024] ±.120 [3048] = +4 [102] / -0
 >120 [3048] ±.300 [7620] = +5% [12]

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

NOTES:

- 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.
- CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.
- PIM LEVEL LABEL PLACEMENT: APPROXIMATELY 6 INCHES FROM CABLE END, 1 PLACE. FOR ALL LENGTHS OF CABLE.
- CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

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PE DS Rev-D4-A320