



RF Cable Assemblies Technical Data Sheet

PE3C6181-50CM

OUTER SHIFLD

DIELECTRIC

Configuration

• Connector 1: TC-SPP250-716M-LP

7/16 DIN Male

Connector 2: TC-SPP250-716M-LP

7/16 DIN Male

Cable: SPP-250-LLPL

Features

- Max Frequency 5.8 GHz
- Low PIM: -160 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)
- Using Times Microwave Components

Applications

- General Purpose
- Laboratory Use
- Low PIM Applications
- Distributed Antenna Systems (DAS)
- · Plenum Installations
- Multi-Carrier Communication Systems
- PIM Testing



SPP-250-LLPL

Ø 280

[7.11] JACKET

Description

Pasternack's PE3C6181-50CM 7/16 DIN male to 7/16 DIN male 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 7/16 DIN to 7/16 DIN cable assembly has a male to male gender configuration with 50 ohm corrugated SPP-250-LLPL coax. The PE3C6181-50CM 7/16 DIN male to 7/16 DIN male cable assembly operates to 5.8 GHz. Our low PIM design also offers excellent passive intermodulation performance with PIM levels better than -160 dBc. Times Microwave cable is used in each assembly and TMS components are used to form connections with the super flexible low PIM cable. These cable assemblies are expertly built to satisfy your specific need with high quality Times Microwave Systems manufactured parts.

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 7/16 DIN Male to 7/16 DIN Male Low PIM Cable 50 cm Length Using SPP-250-LLPL Coax Using Times Microwave Parts PE3C6181-50CM

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623 **Phone:** (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451





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Electrical Specifications

Minimum	Typical	Maximum	Units
DC		5.8	GHz
	750	1.4:1	
	76		%
100			dB
	-165	-160	dBc
	27 [88.58]		pF/ft [pF/m]
	0.067 [0.22]		uH/ft [uH/m]
	3 [9.84]		Ω/1000ft [Ω/Km]
	DC	76 100 -165 27 [88.58] 0.067 [0.22]	DC 5.8 1.4:1 76 100 -165 -160 27 [88.58] 0.067 [0.22]

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.45	0.7	1	2.5	5.8	GHz
Insertion Loss (Max.)	0.21	0.26	0.3	0.48	0.75	dB

Electrical Specification Notes:

PIM test results vary between cables

The Insertion Loss data above is based on the performance specifications of the coax used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1*SQRT(FGHz) dB per connector.

Mechanical Specifications

Cable Assembly

Description	Minimum	Typical	Maximum	Units
Length		19.7 [500.0]		in [mm]
Jacket Diameter		0.28 [7.11]		in [mm]
One Time Minimum Bend Radius	1.25			in
Bending Moment		0.8		lbs-ft

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Cable Characteristics

Description	Specification		
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		
Shield Layer 1	Helically Corrugated Copper Tube		
Outer Conductor Material and Plating	Copper		
Outer Conductor Diameter	0.25 in [6.35 mm]		
Jacket Material	FEP, Blue		

Connector Characteristics

Description	Connector 1	Connector 2
Туре	7/16 DIN Male	7/16 DIN Male
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Silver	Brass, Silver
Contact Plating Specification	200μ in	200μ in
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	80 μin	80 μin
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Specification	80 μin	80 μin
Torque	22.127 ft-lbs 30 Nm	22.127 ft-lbs 30 Nm

Mechanical Specification Notes:

Environmental Specifications

Description	Specification	
Temperature Operating Range	-55 to +200 deg C	
Temperature Storage Range	-55 to +200 deg C	
Plenum Rating	UL910	

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Compliance Certifications (see product page for current document)

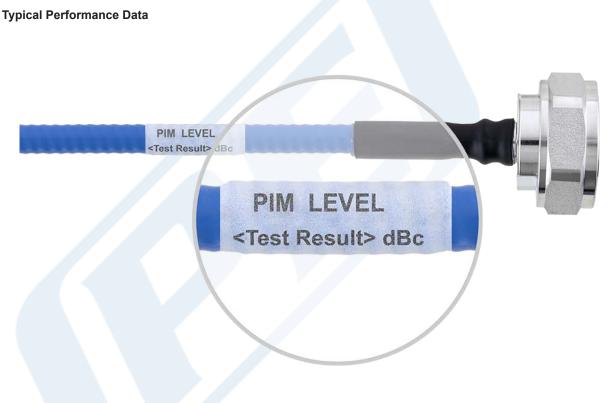


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Plotted and Other Data
Notes:

• Values at 25°C, sea level.



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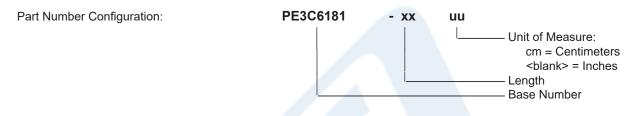




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How to Order



Example: PE3C6181-12 = 12 inches long cable PE3C6181-100cm = 100 cm long cable

Plenum 7/16 DIN Male to 7/16 DIN Male Low PIM Cable 50 cm Length Using SPP-250-LLPL Coax Using Times Microwave Parts 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.

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URL: https://www.pasternack.com/7-16-din-male-7-16-din-male-spp250llpl-cable-assembly-pe3c6181-50cm-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.

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