



Plenum 4.3-10 Male to 4.3-10 Female Low PIM Cable 48 Inch Length Using SPP-250-LLPL Coax Using Times Microwave Parts

## RF Cable Assemblies Technical Data Sheet

**PE3C6174-48**

### Configuration

- Connector 1: 4.3-10 Male
- Connector 2: 4.3-10 Female
- Cable Type: 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

### Description

Pasternack's PE3C6174-48 4.3-10 male to 4.3-10 female 48 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 4.3-10 to 4.3-10 cable assembly has a male to female gender configuration with 50 ohm corrugated SPP-250-LLPL coax. The PE3C6174-48 4.3-10 male to 4.3-10 female 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 4.3-10 Male to 4.3-10 Female Low PIM Cable 48 Inch Length Using SPP-250-LLPL Coax Using Times Microwave Parts PE3C6174-48](#)



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### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
VSWR			1.4:1	
Velocity of Propagation		76		%
RF Shielding	100			dB
Passive Intermodulation		-165	-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]		$\Omega$ /1000ft [ $\Omega$ /Km]

### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.45	0.7	1	2.5	5.8	GHz
Insertion Loss (Max.)	0.3	0.38	0.43	0.7	1.1	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  $0.1 \cdot \sqrt{\text{FGHz}}$  dB per connector.

### Mechanical Specifications

#### Cable Assembly

Weight 0.51 lbs [231.33 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  
 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  
 Jacket Diameter 0.28 in [7.11 mm]

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One Time Minimum Bend Radius 1.25 in [31.75 mm]  
Bending Moment 0.8 lbs-ft [1.08 N-m]

### Connectors

Description	Connector 1	Connector 2
Type	4.3-10 Male	4.3-10 Female
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Phosphor Bronze, Silver	Phosphor Bronze, Silver
Contact Plating Specification	200 $\mu$ in	200 $\mu$ in
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Brass, Tri-Metal
Outer Conductor Plating Specification		80 $\mu$ in
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	80 $\mu$ in	80 $\mu$ in
Coupling Nut Material and Plating	Brass, Tri-Metal	
Coupling Nut Plating Specification	80 $\mu$ in	
Torque	44.25 in-lbs [5 Nm]	

### Environmental Specifications

#### Temperature

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

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

### Plotted and Other Data

Notes:

- Values at 25°C, sea level.

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**PE3C6174-48**

**How to Order**

Part Number Configuration:

**PE3C6174**

- **xx**

**uu**

Unit of Measure:  
cm = Centimeters  
<blank> = Inches  
Length  
Base Number

Example: PE3C6174-12 = 12 inches long cable  
PE3C6174-100cm = 100 cm long cable

Plenum 4.3-10 Male to 4.3-10 Female Low PIM Cable 48 Inch 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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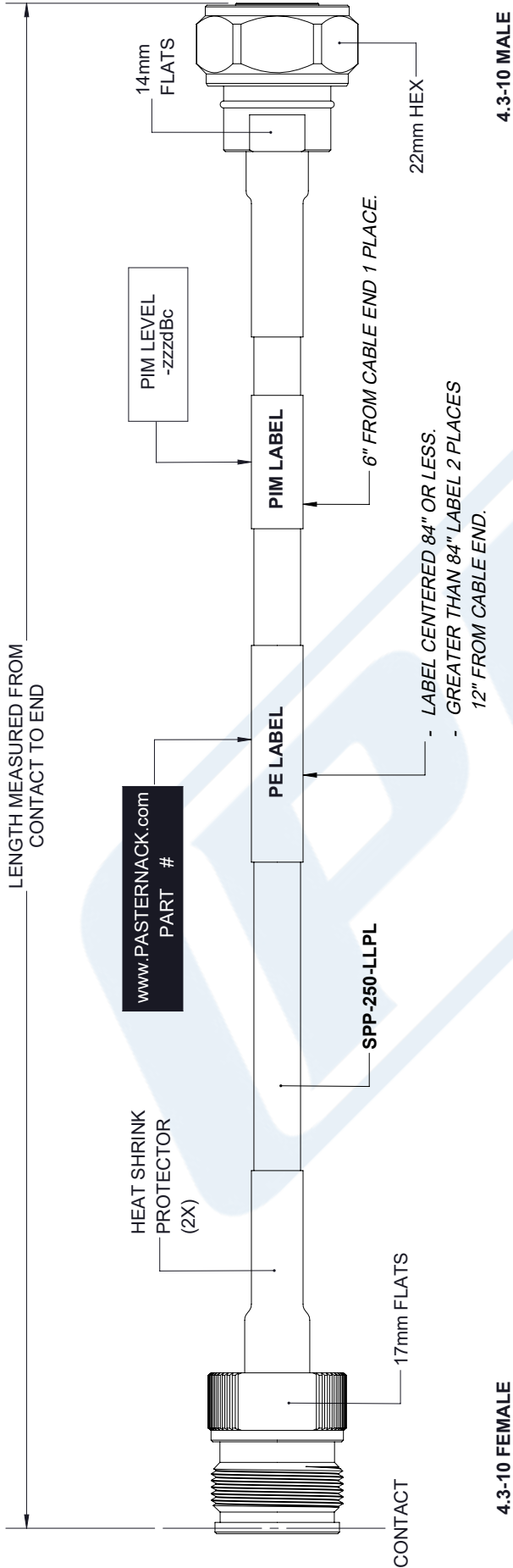
URL: <https://www.pasternack.com/4.3-10-male-4.3-10-female-spp250llpl-cable-assembly-pe3c6174-48-p.aspx>

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# PE3C6174-48 CAD Drawing

Plenum 4.3-10 Male to 4.3-10 Female Low PIM Cable 48 Inch Length  
Using SPP-250-LLPL Coax Using Times Microwave Parts

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	04/09/19	S. ELLIS



<p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS</p> <p>TOLERANCES:                  X±.2 [5.08] FRACTIONS                  .XX±.01 [.25] ±.132                  .XXX±.005 [1.13] ANGLES ± 1°</p> <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p> <p>THIRD-ANGLE PROJECTION</p>	<p>www.PASTERNAK.com PART #</p>	<p>PE3C6174</p>	<p>REV A</p>

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<p>SIZE A</p> <p>CAGE DRAWN BY</p> <p>53919 K.DANG</p> <p>PART NUMBER</p> <p>PE3C6174</p>	<p>REV A</p>