



# **RF Cable Assemblies Technical Data Sheet**

PE3C6241-12

# Configuration

Connector 1: 4.3-10 FemaleConnector 2: N Male Right AngleCable 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 PE3C6241-12 4.3-10 female to type N male right angle 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 4.3-10 to type N cable assembly has a female to male gender configuration with 50 ohm corrugated SPP-250-LLPL coax. The PE3C6241-12 4.3-10 female to type N 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. The right angle type N interface on the SPP-250-LLPL cable allows for easier connections in tight spaces. 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 Female to N Male Right Angle Low PIM Cable 12 Inch Length Using SPP-250-LLPL Coax Using Times Microwave Parts PE3C6241-12

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**

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]		Ω/1000ft [Ω/Km]

#### Specifications by Frequency

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Description	F1	F2	F3	F4	F5	Units
Frequency	0.45	0.7	1	2.5	5.8	GHz
Insertion Loss (Max.)	0.23	0.26	0.28	0.38	0.52	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 for the female connector and 0.12 dB for the male connector.

#### **Mechanical Specifications**

#### **Cable Assembly**

Weight 0.3 lbs [136.08 g]

Cable

Cable TypeSPP-250-LLPLImpedance50 OhmsInner Conductor TypeSolidInner Conductor Material and PlatingCopperDielectric TypePTFENumber of Shields1

Shield Layer 1 Helically Corrugated Copper Tube

Outer Conductor Material and Plating Copper

Outer Conductor Diameter 0.25 in [6.35 mm]

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Jacket Material Jacket Diameter FEP, Blue 0.28 in [7.11 mm]

Jacket Diameter

0.28 In [7.11 mm

One Time Minimum Bend Radius Bending Moment

1.25 in [31.75 mm] 0.8 lbs-ft [1.08 N-m]

-55 to +200 deg C

-55 to +200 deg C

UL910

#### Connectors

Description	Connector 1	Connector 2  N Male Right Angle		
Туре	4.3-10 Female			
Impedance	50 Ohms	50 Ohms		
Contact Material and Plating	Phosphor Bronze, Silver	Phosphor Bronze, Silve		
Contact Plating Specification	200μ in	196µ in		
Dielectric Type	PTFE	PTFE		
Outer Conductor Material and Plating	Brass, Tri-Metal			
Outer Conductor Plating Specification	80μ in			
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal		
Body Plating Specification	80μ in	118µ in		
Coupling Nut Material and Plating		Brass, Tri-Metal		
Coupling Nut Plating Specification		118µ in		
Torque	10 in-lbs [1.13 Nm]			

### **Environmental Specifications**

**Temperature** 

Operating Range Storage Range Plenum Rating

Compliance Certifications (see product page for current document)

#### **Plotted and Other Data**

Notes:

Values at 25°C, sea level.

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#### **How to Order**



Example: PE3C6241-12 = 12 inches long cable PE3C6241-100cm = 100 cm long cable

Plenum 4.3-10 Female to N Male Right Angle Low PIM Cable 12 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-female-n-male-spp250llpl-cable-assembly-pe3c6241-12-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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