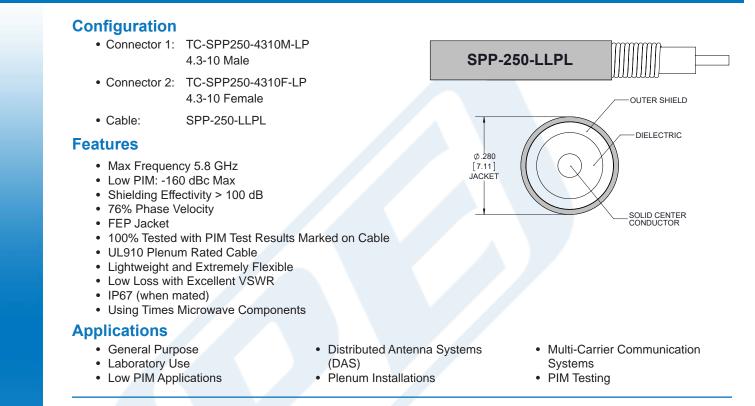




PE3C6174-24

### **RF** Cable Assemblies Technical Data Sheet



#### Description

Pasternack's PE3C6174-244.3-10 male to 4.3-10 female 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 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 PE3C6174-244.3-10 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 24 Inch Length Using SPP-250-LLPL Coax Using Times Microwave Parts PE3C6174-24

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





### **RF Cable Assemblies Technical Data Sheet**

### PE3C6174-24

#### **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**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.45	0.7	1	2.5	5.8	GHz
Insertion Loss (Max.)	0.22	0.28	0.32	0.51	0.8	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		24.0 [609.6]		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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### **RF** Cable Assemblies Technical Data Sheet

### PE3C6174-24

**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	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	200µ in	200µ 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	80µ in
Coupling Nut Material and Plating	Brass, Tri-Metal	
Coupling Nut Plating Specification	80µ in	
Torque	44.25 in-lbs 5 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	
Plenum Rating	UL910	

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 24 Inch Length Using SPP-250-LLPL Coax Using Times Microwave Parts PE3C6174-24

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PE3C6174-24

Plenum 4.3-10 Male to 4.3-10 Female Low PIM Cable 24 Inch Length Using SPP-250-LLPL Coax Using Times Microwave Parts

# RF Cable Assemblies Technical Data Sheet

Compliance Certifications (see product page for current document)
Plotted and Other Data Notes: • Values at 25°C, sea level.
Typical Performance Data
PIN LEVEL   PIM LEVEL   Create Result> dBc
Coax Using Times Microwave Parts PE3C6174-24

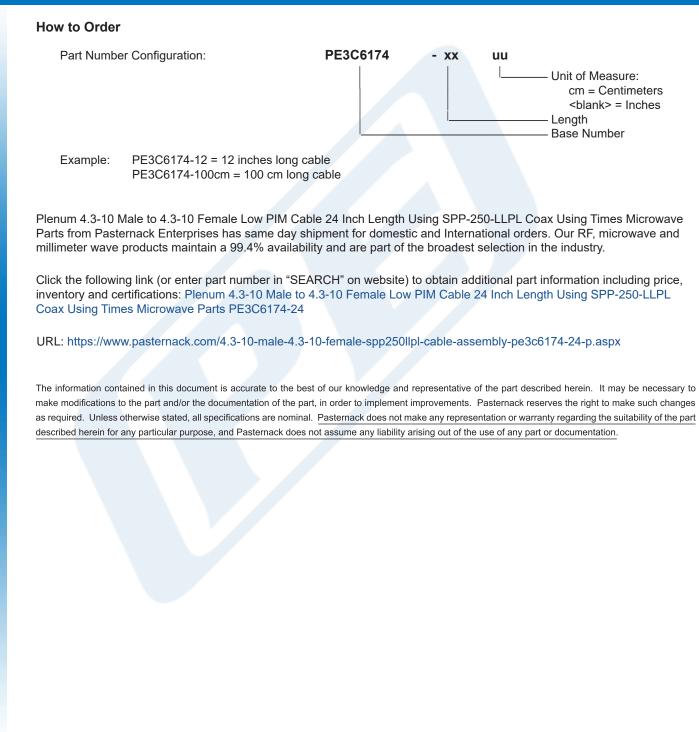
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## **RF Cable Assemblies Technical Data Sheet**

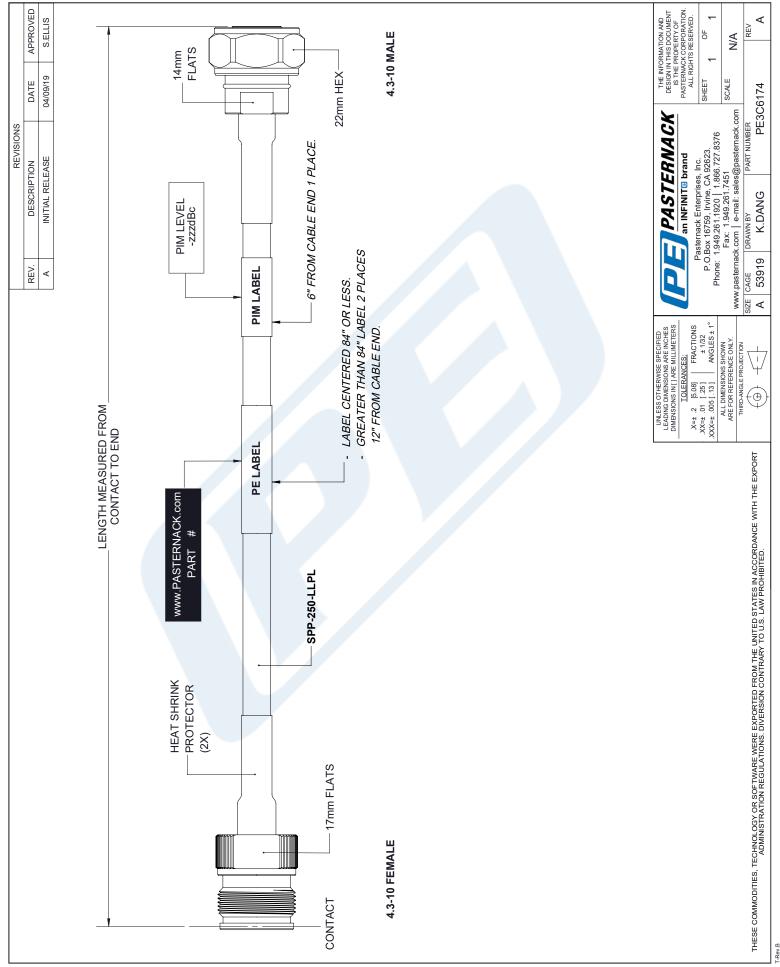
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PE3C6174-24 CAD Drawing Plenum 4.3-10 Male to 4.3-10 Female Low PIM Cable 24 Inch Length

Using SPP-250-LLPL Coax Using Times Microwave Parts



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