



#### PE3C6251-48

#### Configuration

Connector 1: 7/16 DIN Male TC-SPP250-716M-LP
Connector 2: NEX10 Male TC-250-NX10M-LP

Cable Type: SPP-250-LLPLCoax Flex Type: Corrugated

#### **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

# SPP-250-LLPL OUTER SHIELD OUTER SHIELD DIELECTRIC SOLID CENTER

# **Applications**

- · General Purpose
- Laboratory Use
- · Low PIM Applications

- Distributed Antenna Systems (DAS)
- · Plenum Installations
- Multi-Carrier Communication Systems

#### · PIM Testing

#### **Description**

Pasternack's PE3C6251-48 7/16 DIN male to NEX10 male 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 7/16 DIN to NEX10 cable assembly has a male to male gender configuration with 50 ohm corrugated SPP-250-LLPL coax. The PE3C6251-48 7/16 DIN male to NEX10 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.

#### **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





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#### **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Passive Intermodulation		-165	-160	dBc
IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz				
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**

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\*SQRT(FGHz) dB per connector.

#### **Mechanical Specifications**

Width/Diameter 1.14 in [28.96 mm] Weight 0.49 lbs [222.26 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

Shield Layer 1 Helically Corrugated Copper Tube Outer Conductor 1 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] 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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# PE3C6251-48

#### **Connectors**

Description	Connector 1	Connector 2
Туре	7/16 DIN Male	NEX10 Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles		500
Contact Material and Plating	Brass, Silver	Brass, Silver
Contact Plating Specification	200μ in	100 μin
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	80 μin	100 μin
Coupling Nut Material and Plating	Brass, Nickel	Brass, Tri-Metal
Coupling Nut Plating Specification	80 μin	100 μin
Torque	22.127 ft-lbs 30 Nm	13.28 in-lbs 1.5 Nm

## **Environmental Specifications**

Operating Range Temperature -55 to +200 deg C
Storage Range Temperature -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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## **Typical Performance Data**

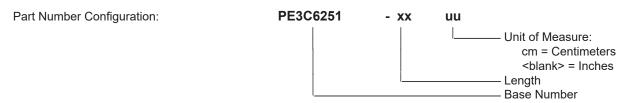






### PE3C6251-48

#### **How to Order**



Example: PE3C6251-12 = 12 inches long cable

PE3C6251-100cm = 100 cm long cable

Plenum 7/16 DIN Male to NEX10 Male 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.

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 NEX10 Male Low PIM Cable 48 Inch Length Using SPP-250-LLPL Coax Using Times Microwave Parts PE3C6251-48

URL: https://www.pasternack.com/7-16-din-male-nex10-male-spp250llpl-cable-assembly-pe3c6251-48-p.aspx

The information contained within 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 impliment improvements. Pasternack Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

# PE3C6251-48 CAD Drawing

Plenum 7/16 DIN Male to NEX10 Male Low PIM Cable 48 Inch Length Using SPP-250-LLPL Coax Using Times Microwave Parts

