



# RF Cable Assemblies Technical Data Sheet

PE3C6346-48

# Configuration

· Connector 1: N Male

· Connector 2: N Male Right Angle

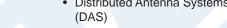
• Cable Type: SPO-250

## **Features**

- Max Frequency 5.8 GHz
- Low PIM: -160 dBc Max
- 83% Phase Velocity
- PE Jacket
- 100% Tested with PIM Test Results Marked on 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)
- **Multi-Carrier Communication** Systems
- PIM Testing



### Description

Pasternack's PE3C6346-48 type N male to type N male right angle 48 inch cable using SPO-250 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 type N to type N cable assembly has a male to male gender configuration with 50 ohm corrugated SPO-250 coax. The PE3C6346-48 type N male 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 SPO-250 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: Outdoor Rated N Male to N Male Right Angle Low PIM Cable 48 Inch Length Using

**SPO-250** OUTER SHIFLD DIELECTRIC Ø 303 [7.69] SOLID CENTER CONDUCTOR

SPO-250 Coax Using Times Microwave Parts PE3C6346-48





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## **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
VSWR		750	1.4:1	
Velocity of Propagation		83		%
Passive Intermodulation		-165	-160	dBc
Capacitance		24 [78.74]		pF/ft [pF/m]
Inductance		0.054 [0.18]		uH/ft [uH/m]

## 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	0.45	0.73	1.15	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

Length\* 48 in [121.92 cm]
Diameter 0.94 in [23.88 mm]

#### Cable

Cable Type SPO-250 Impedance 50 Ohms Inner Conductor Type Solid

Inner Conductor Material and Plating Copper Clad Aluminum

Dielectric Type Foam PE

Number of Shields

Shield Layer 1 Helically Corrugated Copper Tube

Outer Conductor Material and Plating Copper Jacket Material PE, Black

Jacket Diameter 0.303 in [7.7 mm]

One Time Minimum Bend Radius 1.25 in [31.75 mm]
Bending Moment 0.5 lbs-ft [0.68 N-m]

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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





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#### **Connectors**

Description	Connector 1	Connector 2
Туре	N Male	N Male Right Angle
Impedance	50 Ohms	50 Ohms
Mating Cycles	500	
Contact Material and Plating	Brass, Silver	Brass, Silver
Contact Plating Specification	200 μin	200 μin
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, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	80 μin	80 μin
Torque	9.74 in-lbs [1.1 Nm]	15.05 in-lbs [1.7 Nm]
Torque	9.74 in-ibs [1.1 Nm]	15.05 In-IDS [1.7 INM]

Mechanical Specification Notes:

## **Environmental Specifications**

Temperature

Operating Range -55 to +200 deg C Storage Range -55 to +200 deg C

Compliance Certifications (see product page for current document)

# **Plotted and Other Data**

Notes:

· Values at 25°C, sea level.

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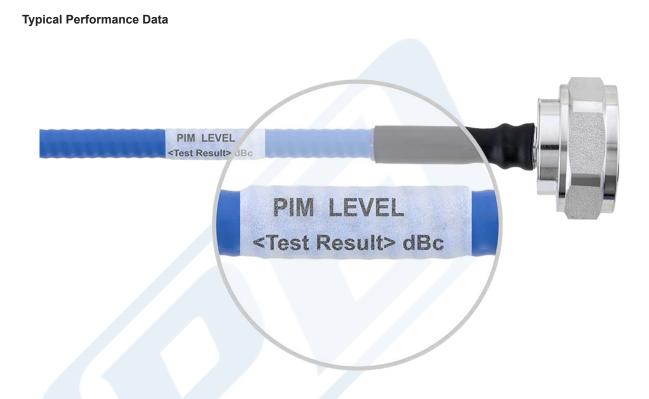
<sup>\*</sup>All cable assemblies have a length tolerance of 1.5% or ± 3/8", whichever is greater.





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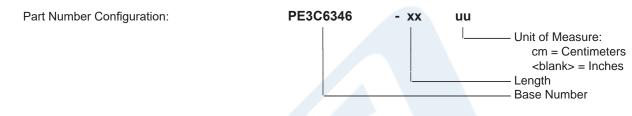




# **RF Cable Assemblies Technical Data Sheet**

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#### **How to Order**



Example: PE3C6346-12 = 12 inches long cable PE3C6346-100cm = 100 cm long cable

Outdoor Rated N Male to N Male Right Angle Low PIM Cable 48 Inch Length Using SPO-250 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: Outdoor Rated N Male to N Male Right Angle Low PIM Cable 48 Inch Length Using SPO-250 Coax Using Times Microwave Parts PE3C6346-48

URL: https://www.pasternack.com/n-male-n-male-spo250-cable-assembly-pe3c6346-48-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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PE3C6346-48 CAD Drawing
Outdoor Rated N Male to N Male Right Angle Low PIM Cable 48 Inch Length Using SPO-250 Coax Using Times Microwave Parts

