



## Outdoor Rated 7/16 DIN Male Right Angle to N Male Cable Using SPO-250 Coax Using Times Microwave Parts

### RF Cable Assemblies Technical Data Sheet

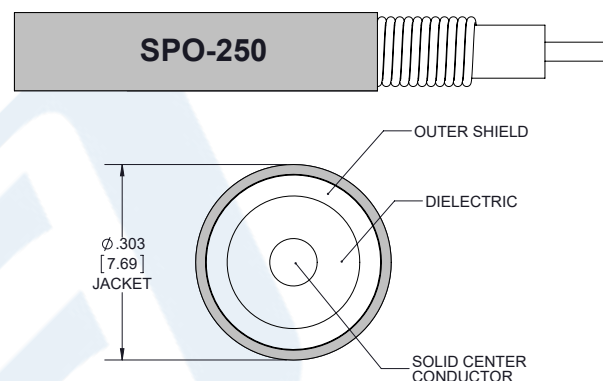
PE3C8504-12

#### Configuration

- Connector 1: 7/16 DIN Male Right Angle
- Connector 2: N Male
- 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
- Outdoor Rated Applications
- Distributed Antenna Systems (DAS)
- Multi-Carrier Communication Systems
- PIM Testing

#### Description

Pasternack's PE3C8504-12 7/16 DIN male right angle to type N male 12 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 7/16 DIN to type N cable assembly has a male to male gender configuration with 50 ohm corrugated SPO-250 coax. The PE3C8504-12 7/16 DIN 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 7/16 DIN interface on the SPO-250 cable allows for easier connections in tight spaces.

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		83		%
Passive Intermodulation			-160	dBc

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Outdoor Rated 7/16 DIN Male Right Angle to N Male Cable Using SPO-250 Coax Using Times Microwave Parts PE3C8504-12](#)



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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	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.13	0.19	0.27	0.42	0.65	dB

**Electrical Specification Notes:**

The Insertion Loss data above is based on the performance specifications of the coax and connectors 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\* 12 in [304.8 mm]  
Diameter 0 in [0 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 1  
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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**Connectors**

Description	Connector 1	Connector 2
Type	7/16 DIN Male Right Angle	N Male
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Silver	Phosphor Bronze, Silver
Contact Plating Specification	196 µin	196 µin
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Tri-Metal
Body Plating Specification	118 µin	118 µin
Coupling Nut Material and Plating	Brass, Nickel	Brass, Tri-Metal
Coupling Nut Plating Specification	118 µin	118 µin
Torque		7.08 in-lbs [0.8 Nm]

**Environmental Specifications**

**Temperature**

Operating Range -40 to +85 deg C

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

**Plotted and Other Data**

Notes:

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**How to Order**

Part Number Configuration:

**PE3C8504 - xx uu**

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

Example: PE3C8504-12 = 12 inches long cable  
PE3C8504-100cm = 100 cm long cable

Outdoor Rated 7/16 DIN Male Right Angle to N Male Cable 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 7/16 DIN Male Right Angle to N Male Cable Using SPO-250 Coax Using Times Microwave Parts PE3C8504-12](https://www.pasternack.com/7-16-din-male-n-male-spo250-cable-assembly-pe3c8504-12-p.aspx)

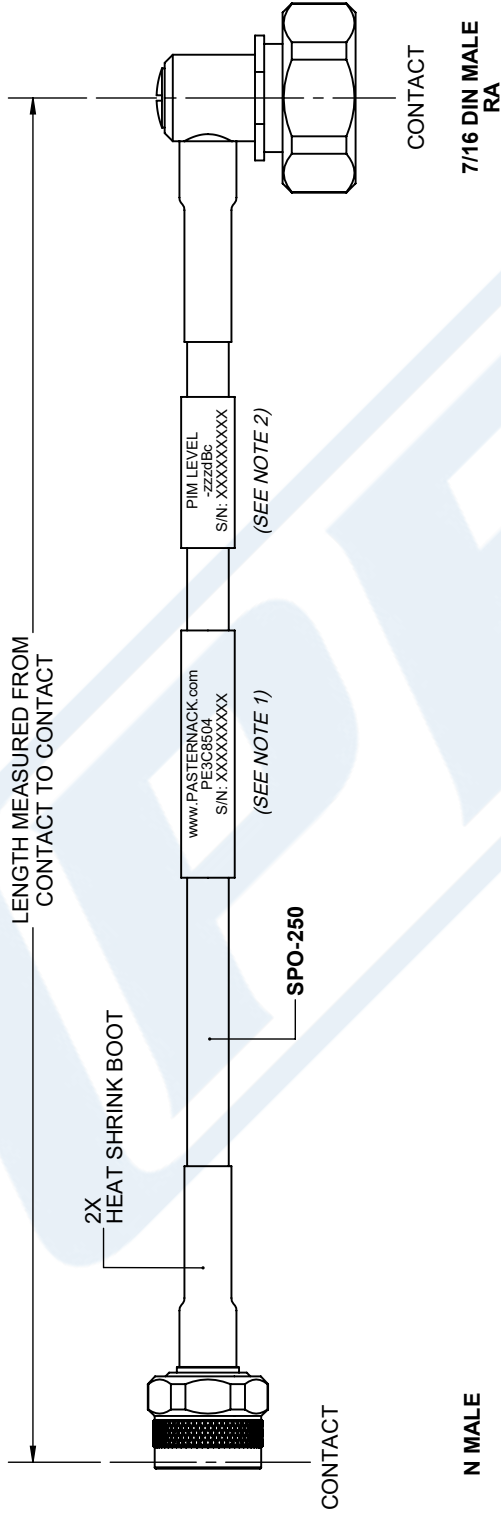
URL: <https://www.pasternack.com/7-16-din-male-n-male-spo250-cable-assembly-pe3c8504-12-p.aspx>

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# PE3C8504-12 CAD Drawing

## Outdoor Rated 7/16 DIN Male Right Angle to N Male Cable Using SPO-250 Coax Using Times Microwave Parts

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	9/21/2021	A. GANWANI



**NOTES:**

1. CABLES 84" AND UNDER HAVE 1 LABEL CENTERED. CABLES OVER 84" HAVE 2 LABELS, ONE AT EACH END 12.0" FROM THE END OF THE CONNECTOR.
2. 6" FROM CABLE END 1 PLACE FOR ALL LENGTHS OF CABLE.

THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS	
TOLERANCES:	FRACTIONS
.X = ± .2 [ .508]	± 1/32
.XX = ± .02 [ .51]	ANGLES ± 1°
.XXX = ± .005 [ .13]	CABLE LENGTH (L), TOLERANCES:
L ≤ 12 [305] = +1 [25] / -0	12 [305] < L ≤ 60 [1524] = +2 [51] / -0
60 [1524] < L ≤ 120 [3048] = +4 [102] / -0	120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
300 [7620] < L = +5% / -0	ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

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an INFINITE brand

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THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV	REV
A	53919	K.DANG	PE3C8504	A	A