



Outdoor Rated 7/16 DIN Female to N Male Low PIM Cable 12 Inch Length Using SPO-250 Coax Using Times Microwave Parts

RF Cable Assemblies Technical Data Sheet

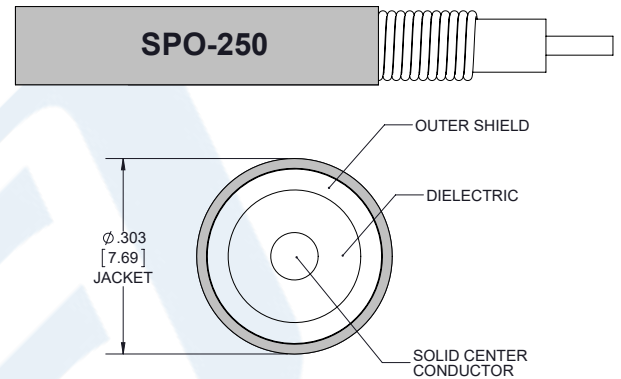
PE3C8507-12

**Configuration**

- Connector 1: 7/16 DIN Female
- 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 PE3C8507-12 7/16 DIN female 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 female to male gender configuration with 50 ohm corrugated SPO-250 coax. The PE3C8507-12 7/16 DIN 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.

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 Female to N Male Low PIM Cable 12 Inch Length Using SPO-250 Coax Using Times Microwave Parts PE3C8507-12](#)



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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 Female	N Male
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Phosphor Bronze, Silver	Phosphor Bronze, Silver
Contact Plating Specification	196 $\mu$ m	196 $\mu$ m
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Brass, Tri-Metal	
Outer Conductor Plating Specification	118 $\mu$ m	
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	118 $\mu$ m	118 $\mu$ m
Coupling Nut Material and Plating		Brass, Tri-Metal
Coupling Nut Plating Specification		118 $\mu$ m
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:

**PE3C8507**

- **xx**

**uu**

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

Example: PE3C8507-12 = 12 inches long cable  
PE3C8507-100cm = 100 cm long cable

Outdoor Rated 7/16 DIN Female to N Male Low PIM Cable 12 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.

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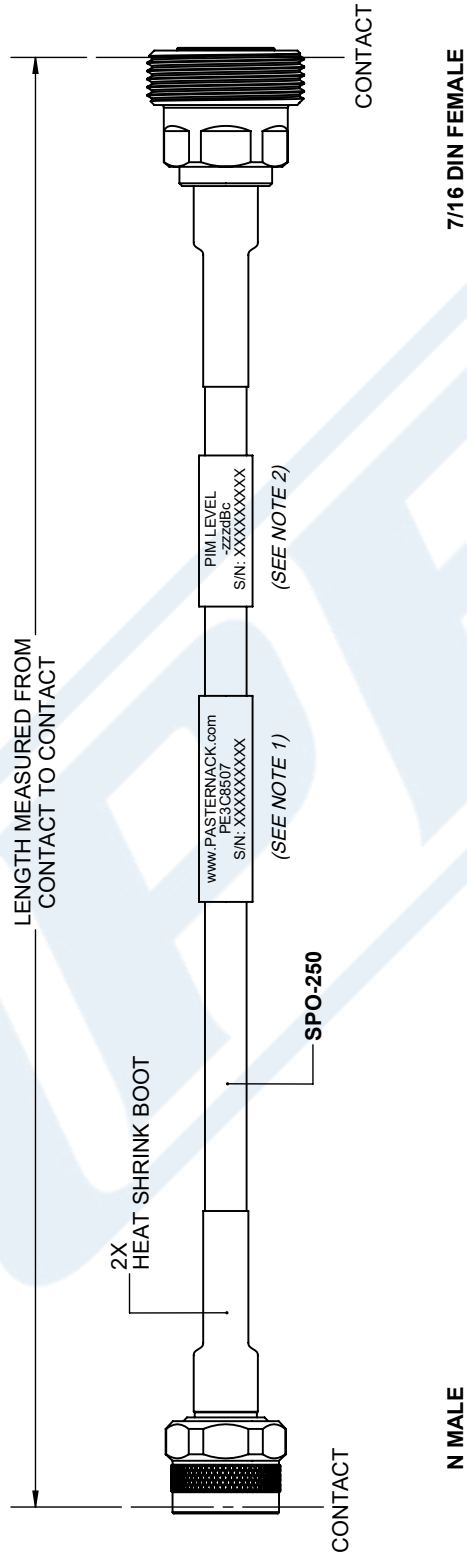
URL: <https://www.pasternack.com/7-16-din-female-n-male-spo250-cable-assembly-pe3c8507-12-p.aspx>

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.

# PE3C8507-12 CAD Drawing

Outdoor Rated 7/16 DIN Female to N Male Low PIM Cable 12 Inch Length Using SPO-250 Coax Using Times Microwave Parts

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



<p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS</p> <p>TOLERANCES:</p> <p>.X = ±.2 [ .008 ] FRACTIONS ±.1/32                  .XX = ±.02 [ .51 ] ±.1/32                  .XXX = ±.005 [ .13 ] ANGLES ± 1°</p> <p>CABLE LENGTH (L), TOLERANCES:                  L ≤ 12 [305] = +1 [25] / -0                  12 [305] &lt; L ≤ 60 [1524] = +2 [51] / -0                  60 [1524] &lt; L ≤ 120 [3048] = +4 [102] / -0                  120 [3048] &lt; L ≤ 300 [7620] = +6 [152] / -0                  300 [7620] &lt; L = +5% / -0</p> <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p>	<p><b>PE PASTERNAK</b>                  an INFINITE brand</p> <p>Pasternack Enterprises, Inc.                  P. O. Box 16759, Irvine, CA 92623.                  Phone: 1.949.261.1920   1.866.727.8376                  Fax: 1.949.261.7451                  Website: www.pasternack.com                  E-mail: sales@pasternack.com</p>	<p>THIRD-ANGLE PROJECTION</p> <p>THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION ALL RIGHTS RESERVED.</p> <p>SHEET 1 OF 1</p> <p>SCALE N/A</p>
	<p>SIZE A</p> <p>CAGE CODE 53919</p> <p>DRAWN BY K.DANG</p> <p>ITEM NO. PE3C8507</p>	<p>REV A</p>

- NOTES:**
- 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.
  - 6" FROM CABLE END 1 PLACE FOR ALL LENGTHS OF CABLE.

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