



Outdoor Rated 7/16 DIN Female to N Male Low PIM Cable 24 Inch Length Using SPO-250 Coax Using Times Microwave Parts

RF Cable Assemblies Technical Data Sheet

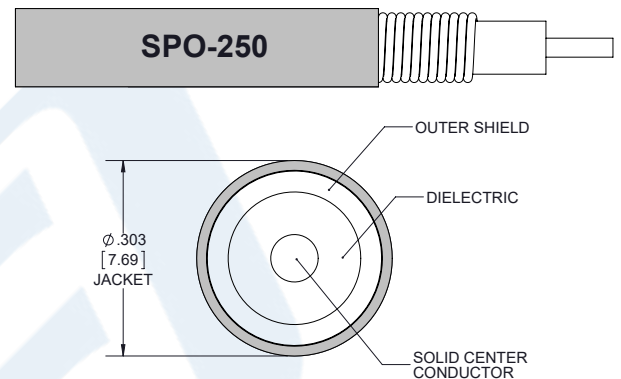
PE3C8507-24

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 PE3C8507-24 7/16 DIN female to type N male 24 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 PE3C8507-24 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 24 Inch Length Using SPO-250 Coax Using Times Microwave Parts PE3C8507-24](#)



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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.) | 0.16 | 0.23 | 0.33 | 0.53 | 0.82 | 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* 24 in [609.6 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 µin | 196 µin |
| Dielectric Type | PTFE | PTFE |
| Outer Conductor Material and Plating | Brass, Tri-Metal | |
| Outer Conductor Plating Specification | 118 µin | |
| Body Material and Plating | Brass, Tri-Metal | Brass, Tri-Metal |
| Body Plating Specification | 118 µin | 118 µin |
| Coupling Nut Material and Plating | | Brass, Tri-Metal |
| Coupling Nut Plating Specification | | 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:

PE3C8507

- **xx**

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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 24 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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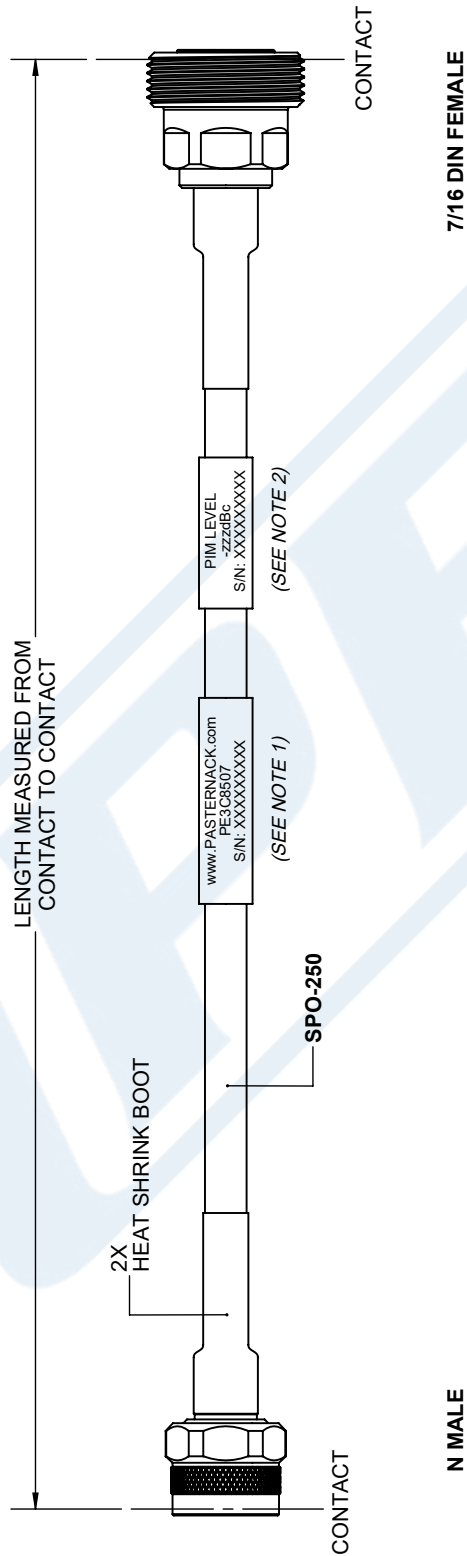
URL: <https://www.pasternack.com/7-16-din-female-n-male-spo250-cable-assembly-pe3c8507-24-p.aspx>

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PE3C8507-24 CAD Drawing

Outdoor Rated 7/16 DIN Female to N Male Low PIM Cable 24 Inch Length Using SPO-250 Coax Using Times Microwave Parts

| REVISIONS | | | |
|-----------|-----------------|-----------|------------|
| REV. | DESCRIPTION | DATE | APPROVED |
| 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:</p> <p>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</p> <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</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>PE PASTERNAK 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>SIZE A CAGE CODE 53919 DRAWN BY K.DANG ITEM NO. PE3C8507</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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