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

RF Cable Assemblies Technical Data Sheet   PE3C8502

Configuration
- Connector 1: 7/16 DIN Male
- Connector 2: N Female
- 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

SPO-250

OUTER SHIELD

DIELECTRIC

Ø .303 [7.69] JACKET

SOLID CENTER CONDUCTOR
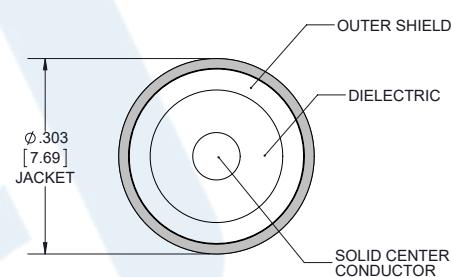
Applications
- General Purpose
- Laboratory Use
- Low PIM Applications
- Outdoor Rated Applications
- Distributed Antenna Systems (DAS)
- Multi-Carrier Communication Systems
- PIM Testing

Description

Pasternack's PE3C8502 7/16 DIN male to type N female 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 female gender configuration with 50 ohm corrugated SPO-250 coax. The PE3C8502 7/16 DIN male to type N female 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 Male to N Female Low PIM Cable Using SPO-250 Coax Using Times Microwave Parts PE3C8502

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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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.)	0.03	0.043	0.062	0.103	0.167	dB
	0.1	0.14	0.2	0.34	0.55	

Electrical Specification Notes:
Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as $0.1 \times SQRT(F_{GHz})$ dB per connector.

Mechanical Specifications

Cable Assembly
Length*   0 in [0 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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Outdoor Rated 7/16 DIN Male to N Female Low PIM Cable
Using SPO-250 Coax Using Times Microwave Parts

RF Cable Assemblies Technical Data Sheet   PE3C8502

Connectors

Description	Connector 1	Connector 2
Type	7/16 DIN Male	N Female
Impedance	50 Ohms	50 Ohms
Mating Cycles		500
Contact Material and Plating	Brass, Silver	Brass, Silver
Contact Plating Specification	196 µin	200 µin
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Brass, Tri-Metal
Outer Conductor Plating Specification		100 µin
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	118 µin	100 µin
Coupling Nut Material and Plating	Brass, Nickel	
Coupling Nut Plating Specification	118 µin	
Torque		9.74 in-lbs [1.1 Nm]

Environmental Specifications
Temperature
Operating Range   -40 to +85 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data
Notes:

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 to N Female Low PIM Cable Using SPO-250 Coax Using Times Microwave Parts PE3C8502

Outdoor Rated 7/16 DIN Male to N Female Low PIM Cable
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RF Cable Assemblies Technical Data Sheet   PE3C8502

How to Order

Part Number Configuration: **PE3C8502   - xx   uu**

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

Example: PE3C8502-12 = 12 inches long cable
              PE3C8502-100cm = 100 cm long cable
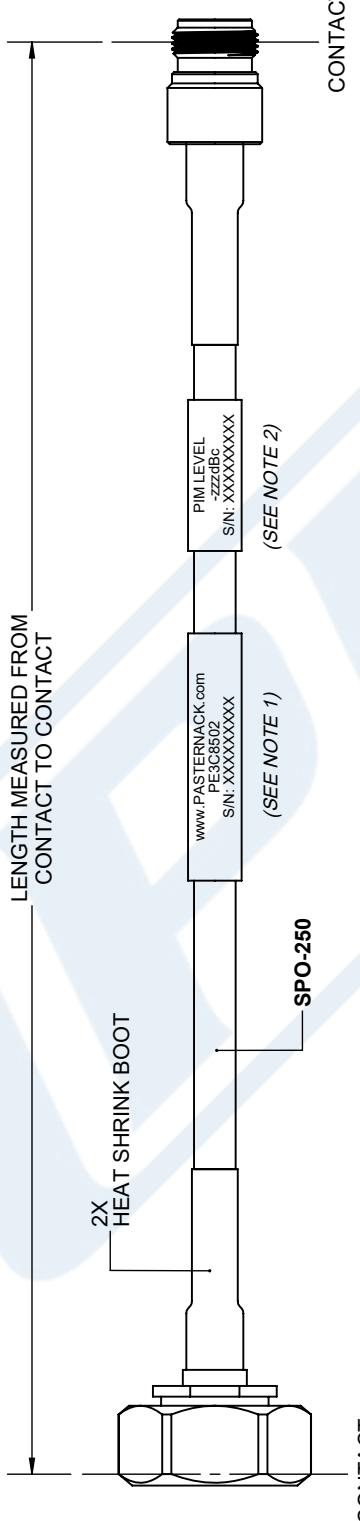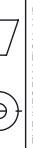
Outdoor Rated 7/16 DIN Male to N Female Low PIM Cable Using SPO-250 Coax Using Times Microwave Parts from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection 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 to N Female Low PIM Cable Using SPO-250 Coax Using Times Microwave Parts PE3C8502

URL: https://www.pasternack.com/7-16-din-male-n-female-spo250-cable-assembly-pe3c8502-p.aspx

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CONTACT

N FEMALE

PIM LEVEL
-zzzdBc
S/N: XXXXXXXX

(SEE NOTE 2)

www.PASTERNACK.com
PE3C8502
S/N: XXXXXXXX

(SEE NOTE 1)

SPO-250

LENGTH MEASURED FROM
CONTACT TO CONTACT

2X
HEAT SHRINK BOOT

7/16 DIN MALE

CONTACT

REVISIONS

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

UNLESS OTHERWISE SPECIFIED
LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:
.X = ± .2   [5.08]   FRACTIONS:
.XX = ± .02 [.51]   ± 1/32
.XXX = ± .005 [.13]   ANGLES ± 1°

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%L / -0

ALL DIMENSIONS SHOWN
ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

SHEET	1	OF	1

SCALE N/A

REV A

PE **PASTERNACK**®
an INFINITE brand

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Fax: 1.949.261.7451
Website: www.pasternack.com
E-mail: sales@pasternack.com

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	K.DANG	PE3C8502

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.

T-Rev.D