

Outdoor Rated 4.3-10 Female to 7/16 DIN Male
Low PIM Cable 48 Inch Length Using SPO-250 Coax
Using Times Microwave Parts



RF Cable Assemblies Technical Data Sheet

PE3C8501-48

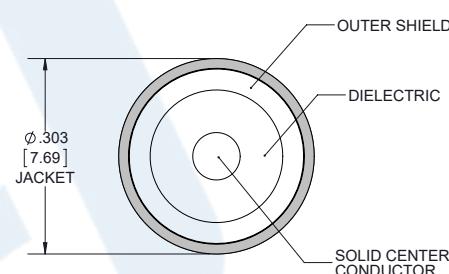
Configuration

- Connector 1: 4.3-10 Female
- Connector 2: 7/16 DIN 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 PE3C8501-48 4.3-10 female to 7/16 DIN male 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 4.3-10 to 7/16 DIN cable assembly has a female to male gender configuration with 50 ohm corrugated SPO-250 coax. The PE3C8501-48 4.3-10 female to 7/16 DIN 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 4.3-10 Female to 7/16 DIN Male Low PIM Cable 48 Inch Length Using SPO-250 Coax Using Times Microwave Parts PE3C8501-48](#)

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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.)	0.22	0.32	0.45	0.73	1.15	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 $0.1 * \text{SQRT}(F\text{GHz})$ dB per connector.

Mechanical Specifications

Cable Assembly

Length*	48 in [121.92 cm]
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]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Outdoor Rated 4.3-10 Female to 7/16 DIN Male Low PIM Cable 48 Inch Length Using SPO-250 Coax Using Times Microwave Parts PE3C8501-48](#)

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Connectors

Description	Connector 1	Connector 2
Type	4.3-10 Female	7/16 DIN Male
Impedance	50 Ohms	50 Ohms
Mating Cycles	500	
Contact Material and Plating	Phosphor Bronze, Silver	Brass, Silver
Contact Plating Specification	200 μ in	196 μ in
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	80 μ in	118 μ in
Coupling Nut Material and Plating		Brass, Nickel
Coupling Nut Plating Specification		118 μ in

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:

PE3C8501

- **xx**

uu

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

Example: PE3C8501-12 = 12 inches long cable
PE3C8501-100cm = 100 cm long cable

Outdoor Rated 4.3-10 Female to 7/16 DIN Male 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 4.3-10 Female to 7/16 DIN Male Low PIM Cable 48 Inch Length Using SPO-250 Coax Using Times Microwave Parts PE3C8501-48](#)

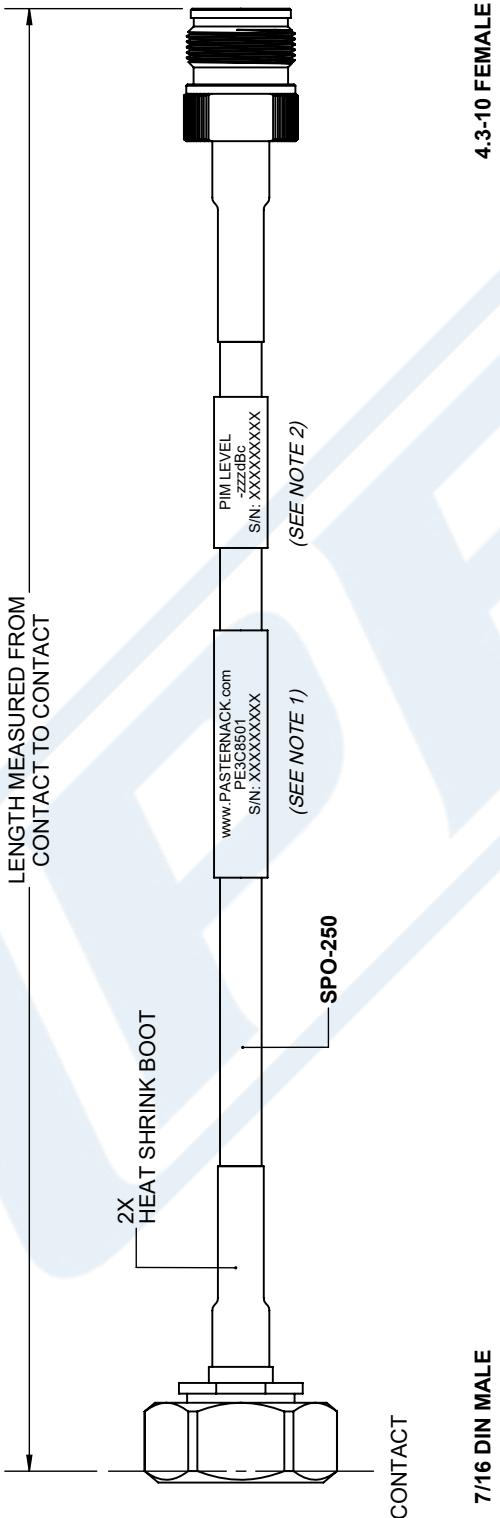
URL: <https://www.pasternack.com/4.3-10-female-7-16-din-male-spo250-cable-assembly-pe3c8501-48-p.aspx>

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.

PE3C8501-48 CAD Drawing

Outdoor Rated 4.3-10 Female to 7/16 DIN Male Low PIM Cable 48 Inch Length 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
2. LABELS, ONE AT EACH END 12.0" FROM THE END OF THE CONNECTOR.
3. 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 US LAW PROHIBITED

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS		TOLERANCES		TOLERANCES		TOLERANCES		TOLERANCES		TOLERANCES		TOLERANCES	
PE	PASTERNAK® an INFINITE® brand	X = ± 0.02	[0.08]	FRACTIONS									
		XX = ± 0.02	[0.13]		± 0.12	ANGLES $\pm 1^\circ$							
		XXX = ± 0.05	[0.13]										
				CABLE LENGTH (L) TOLERANCES:									
				L ± 12 [305] = ± 11 [25] / -0									
				12 [305] < L \leq 60 [1524] = ± 2 [51] / -0									
				60 [1524] < L \leq 120 [3048] = ± 4 [102] / -0									
				120 [3048] < L \leq 300 [7620] = ± 6 [152] / -0									
				300 [7620] < L \leq 450 [11430] = ± 9 [228] / -0									
				450 [11430] < L \leq 600 [15240] = ± 12 [305] / -0									
				600 [15240] < L \leq 750 [19050] = ± 15 [381] / -0									
				750 [19050] < L \leq 900 [22900] = ± 18 [457] / -0									
				900 [22900] < L \leq 1050 [27430] = ± 22 [561] / -0									
				1050 [27430] < L \leq 1200 [30480] = ± 26 [660] / -0									
				1200 [30480] < L \leq 1350 [34380] = ± 30 [762] / -0									
				1350 [34380] < L \leq 1500 [38180] = ± 34 [854] / -0									
				1500 [38180] < L \leq 1650 [41980] = ± 38 [923] / -0									
				1650 [41980] < L \leq 1800 [45780] = ± 42 [1023] / -0									
				1800 [45780] < L \leq 1950 [49580] = ± 46 [1143] / -0									
				1950 [49580] < L \leq 2100 [53380] = ± 50 [1228] / -0									
				2100 [53380] < L \leq 2250 [57180] = ± 54 [1315] / -0									
				2250 [57180] < L \leq 2400 [60980] = ± 58 [1403] / -0									
				2400 [60980] < L \leq 2550 [64780] = ± 62 [1491] / -0									
				2550 [64780] < L \leq 2700 [68580] = ± 66 [1579] / -0									
				2700 [68580] < L \leq 2850 [72380] = ± 70 [1667] / -0									
				2850 [72380] < L \leq 3000 [76180] = ± 74 [1755] / -0									
				3000 [76180] < L \leq 3150 [79980] = ± 78 [1843] / -0									
				3150 [79980] < L \leq 3300 [83780] = ± 82 [1931] / -0									
				3300 [83780] < L \leq 3450 [87580] = ± 86 [2019] / -0									
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				4050 [102780] < L \leq 4200 [106580] = ± 106 [2459] / -0									
				4200 [106580] < L \leq 4350 [110380] = ± 110 [2547] / -0									
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				4800 [121780] < L \leq 4950 [125580] = ± 126 [2899] / -0									
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