

Waterproof IP68 7/16 DIN Female (Jack) to N Male (Plug) Low Loss Cable 50 CM Length Using SPO-250 Coax with Times Microwave Components

PE3C8507/WP-50CM

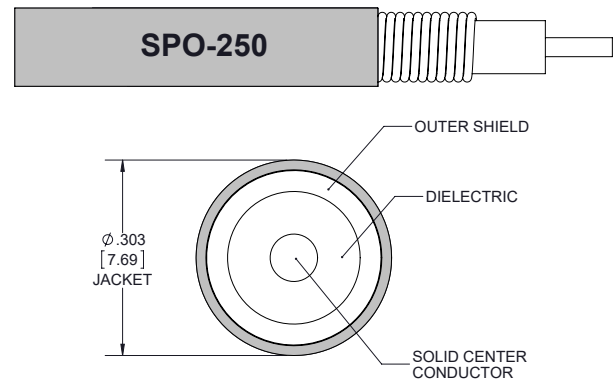


Configuration

- Connector 1: 7/16 DIN Female
- Connector 2: N Male
- Cable Type: SPO-250
- Coax Flex Type: Flexible

Features

- Max Frequency 6 GHz
- Low PIM: -160 dBc Max
- 83% Phase Velocity
- PE Jacket
- Silicone Connector Boot
- IP68 Rated



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C8507/WP-50CM 7/16 DIN female to type N male 50 cm cable using SPO-250 coax is part of our full line of RF components available for same-day shipping. Pasternack's flexible RF cable assemblies are ideal for applications where tight bends and flexure are required. This Pasternack 7/16 DIN to type N cable assembly has a female to male gender configuration with 50 ohm flexible SPO-250 coax. The PE3C8507/WP-50CM 7/16 DIN female to type N male cable assembly operates to 6 GHz.

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		6	GHz
VSWR			1.4:1	
Velocity of Propagation		83		%
Passive Intermodulation			-160	dBc
IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz				
Capacitance		24 [78.74]		pF/ft [pF/m]
Inductance		0.054 [0.18]		uH/ft [uH/m]

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	Units	Weight (lbs)
		Frequency	500	1000	2500	6000	MHz	
PE3C8507/WP	Custom Lengths Available	Insertion Loss (Typ.)	0.028	0.041	0.068	0.108	dB/ft	
			0.1	0.14	0.23	0.36	dB/m	
PE3C8507/WP-24	24 In	Insertion Loss (Typ.)	0.23	0.29	0.4	0.57	dB	0.826
PE3C8507/WP-36	36 In	Insertion Loss (Typ.)	0.26	0.33	0.47	0.67	dB	0.873
PE3C8507/WP-60	60 In	Insertion Loss (Typ.)	0.32	0.2	0.6	0.89	dB	0.967
PE3C8507/WP-50CM	50 CM	Insertion Loss (Typ.)	0.22	0.27	0.37	0.53	dB	0.81

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1: 0.1 dB
 Loss due to Connector 2: $0.1 \times \text{SQRT}(\text{FGHz})$ dB
 Base Weight: 0.779 pounds
 Additional Weight per Inch: 0.00391 pounds

Mechanical Specifications

Cable Assembly

Length 19.685 in [500 mm]
 Width/Diameter 0.5 in [12.7 mm]
 Weight 0.81 lbs [367.41 g]

Cable

Cable Type SPO-250
 Impedance 50 Ohms
 Inner Conductor Type Stranded
 Inner Conductor Material and Plating Copper Clad Aluminum
 Dielectric Type Foam PE
 Outer Conductor 1 Material and Plating Copper, Corrugated
 Jacket Material PE
 Jacket Diameter 0.303 in [7.7 mm]
 One Time Minimum Bend Radius 1 in [25.4 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
Option		Weatherproof Boot
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Phosphor Bronze, Silver	Phosphor Bronze, Silver
Contact Plating Specification	200 µin minimum	196 µin minimum
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Brass, Tri-Metal	
Outer Conductor Plating Specification	100 µin minimum	
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	100 µin minimum	118 µin minimum
Coupling Nut Material and Plating		Brass, Tri-Metal
Coupling Nut Plating Specification		118 µin minimum
Boot Material	Silicone	Silicone

Environmental Specifications

Operating Range Temperature	-40 to +85 deg C
Ingress Protection (IP) Rating	IP68

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

Plotted and Other Data

Notes:
Values at 25°C, sea level.

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PE3C8507/WP-50CM

Typical Performance Data

How to Order

Part Number Configuration:

PE3C8507/WP

- xx

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

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

Waterproof IP68 7/16 DIN Female (Jack) to N Male (Plug) Low Loss Cable 50 CM Length Using SPO-250 Coax with Times Microwave Components 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: [Waterproof IP68 7/16 DIN Female \(Jack\) to N Male \(Plug\) Low Loss Cable 50 CM Length Using SPO-250 Coax with Times Microwave Components PE3C8507/WP-50CM](https://www.pasternack.com/waterproof-ip68-7-16-din-female-jack-to-n-male-plug-low-loss-cable-50-cm-length-using-spo-250-pe3c8507-wp-50cm-p.aspx)

URL: <https://www.pasternack.com/waterproof-ip68-7-16-din-female-jack-to-n-male-plug-low-loss-cable-50-cm-length-using-spo-250-pe3c8507-wp-50cm-p.aspx>

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PE3C8507/WP-50CM CAD Drawing

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