

N Male to N Male Low PIM Cable 48 Inch Length Using SPO-500 Coax



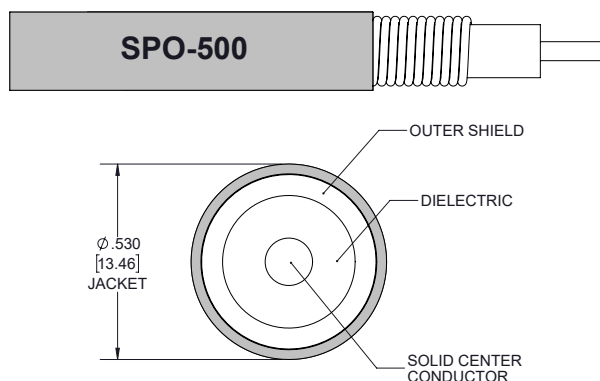
PE3W10019-48

Configuration

- Connector 1: N Male
- Connector 2: N Male
- Cable Type: SPO-500
- Coax Flex Type: Corrugated

Features

- Max Frequency 6 GHz
- Low PIM: -158 dBc Max
- 83% Phase Velocity
- PE Jacket
- 500 Mating Cycles



Applications

- General Purpose
- Laboratory Use
- Low PIM Applications

Description

Pasternack's PE3W10019-48 type N male to type N male 48 inch cable using SPO-500 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 type N to type N cable assembly has a male to male gender configuration with 50 ohm corrugated SPO-500 coax. The PE3W10019-48 type N male to type N male cable assembly operates to 6 GHz. Our low PIM design also offers excellent passive intermodulation performance with PIM levels better than -158 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		6	GHz
VSWR			1.4:1	
Velocity of Propagation		83		%
Passive Intermodulation IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz			-158	dBc
Capacitance		24 [78.74]		pF/ft [pF/m]

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	1	2.5	6		GHz

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Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Insertion Loss (Max.)	0.3	0.34	0.41	0.58		dB

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax cable and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

Length	48 in [121.92 cm]
Width/Diameter	0.5 in [12.7 mm]
Weight	0.657 lbs [298.01 g]

Cable

Cable Type	SPO-500
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 1 Material and Plating	Copper
Jacket Material	PE, Black
Jacket Diameter	0.53 in [13.46 mm]
One Time Minimum Bend Radius	2.25 in [57.15 mm]

Connectors

Description	Connector 1	Connector 2
Type	N Male	N Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	500	500
Contact Material and Plating	Brass, Silver	Brass, Silver
Contact Plating Specification	200 μin	200 μin
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	80 μin	80 μin
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	80 μin	80 μin
Torque	6 in-lbs 0.68 Nm	6 in-lbs 0.68 Nm

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Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

Plotted and Other Data

Notes:

Typical Performance Data

How to Order

Part Number Configuration: **PE3W10019 - xx uu**

PE3W10019: Base Number
 - xx: Length
 uu: Unit of Measure:
 cm = Centimeters
 <blank> = Inches

Example: PE3W10019-12 = 12 inches long cable
 PE3W10019-100cm = 100 cm long cable

N Male to N Male Low PIM Cable 48 Inch Length Using SPO-500 Coax 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: [N Male to N Male Low PIM Cable 48 Inch Length Using SPO-500 Coax PE3W10019-48](#)

URL: <https://www.pasternack.com/n-male-n-male-spo500-cable-assembly-pe3w10019-48-p.aspx>

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PE3W10019-48 CAD Drawing

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