

N Male to N Male Low PIM Cable 50 cm Length Using SPO-500 Coax

PE3W10019-50CM

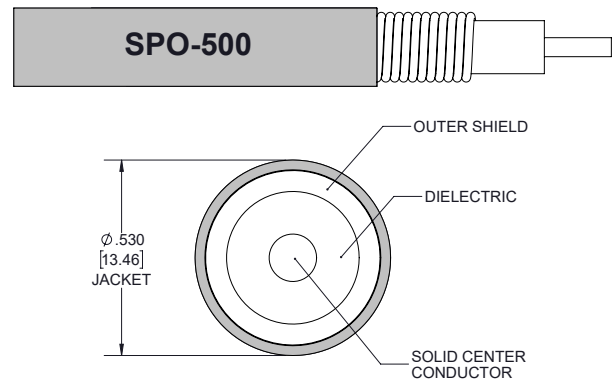


Configuration

- 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 PE3W10019-50CM type N male to type N male 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 PE3W10019-50CM 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.)	0.24	0.26	0.29	0.36		dB/ft
	0.79	0.85	0.95	1.18		dB/m

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

Weight 0.299 lbs [135.62 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

Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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PE3W10019-50CM

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

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

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

N Male to N Male Low PIM Cable 50 cm 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 50 cm Length Using SPO-500 Coax PE3W10019-50CM](#)

URL: <https://www.pasternack.com/n-male-n-male-spo500-cable-assembly-pe3w10019-50cm-p.aspx>

The information contained within 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 Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

PE3W10019-50CM CAD Drawing

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