

NEX10 Female to NEX10 Female Low PIM Cable Using SPO-250 Coax

PE3W16168

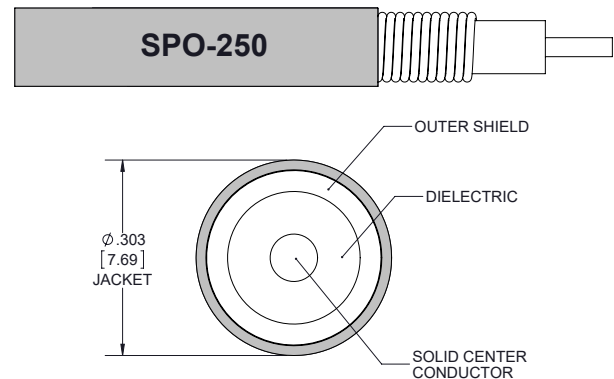


Configuration

- Connector 1: NEX10 Female
- Connector 2: NEX10 Female
- Cable Type: SPO-250
- Coax Flex Type: Corrugated

Features

- Max Frequency 5.8 GHz
- Low PIM: -160 dBc Max
- 83% Phase Velocity
- PE Jacket



Applications

- General Purpose
- Laboratory Use
- Low PIM Applications

Description

Pasternack's PE3W16168 NEX10 female to NEX10 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 NEX10 to NEX10 cable assembly has a female to female gender configuration with 50 ohm corrugated SPO-250 coax. The PE3W16168 NEX10 female to NEX10 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
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	F5	Units	Weight (lbs)
		Frequency	450	500	1000	2500	5800	MHz	
PE3W16168	Custom Lengths Available	Insertion Loss (Typ.)	0.04	0.04	0.06	0.103	0.167	dB/ft	
			0.14	0.14	0.2	0.34	0.55	dB/m	
PE3W16168-12	12 inch	Insertion Loss (Typ.)	0.25	0.25	0.26	0.31	0.37	dB	0.087
PE3W16168-24	24 inch	Insertion Loss (Typ.)	0.29	0.29	0.32	0.41	0.54	dB	0.135
PE3W16168-36	36 inch	Insertion Loss (Typ.)	0.33	0.33	0.38	0.51	0.7	dB	0.182
PE3W16168-60	60 inch	Insertion Loss (Typ.)	0.41	0.41	0.5	0.72	1.04	dB	0.276
PE3W16168-50CM	50 CM	Insertion Loss (Typ.)	0.27	0.27	0.3	0.37	0.48	dB	0.118

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 dB
Base Weight:	0.087 pounds
Additional Weight per Inch:	0.00392 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.087 lbs [39.46 g]

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 1 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]

Connectors

Description	Connector 1	Connector 2
Type	NEX10 Female	NEX10 Female
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Bronze, Silver	Bronze, Silver
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal

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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:

PE3W16168

- xx

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Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3W16168-12 = 12 inches long cable
PE3W16168-100cm = 100 cm long cable

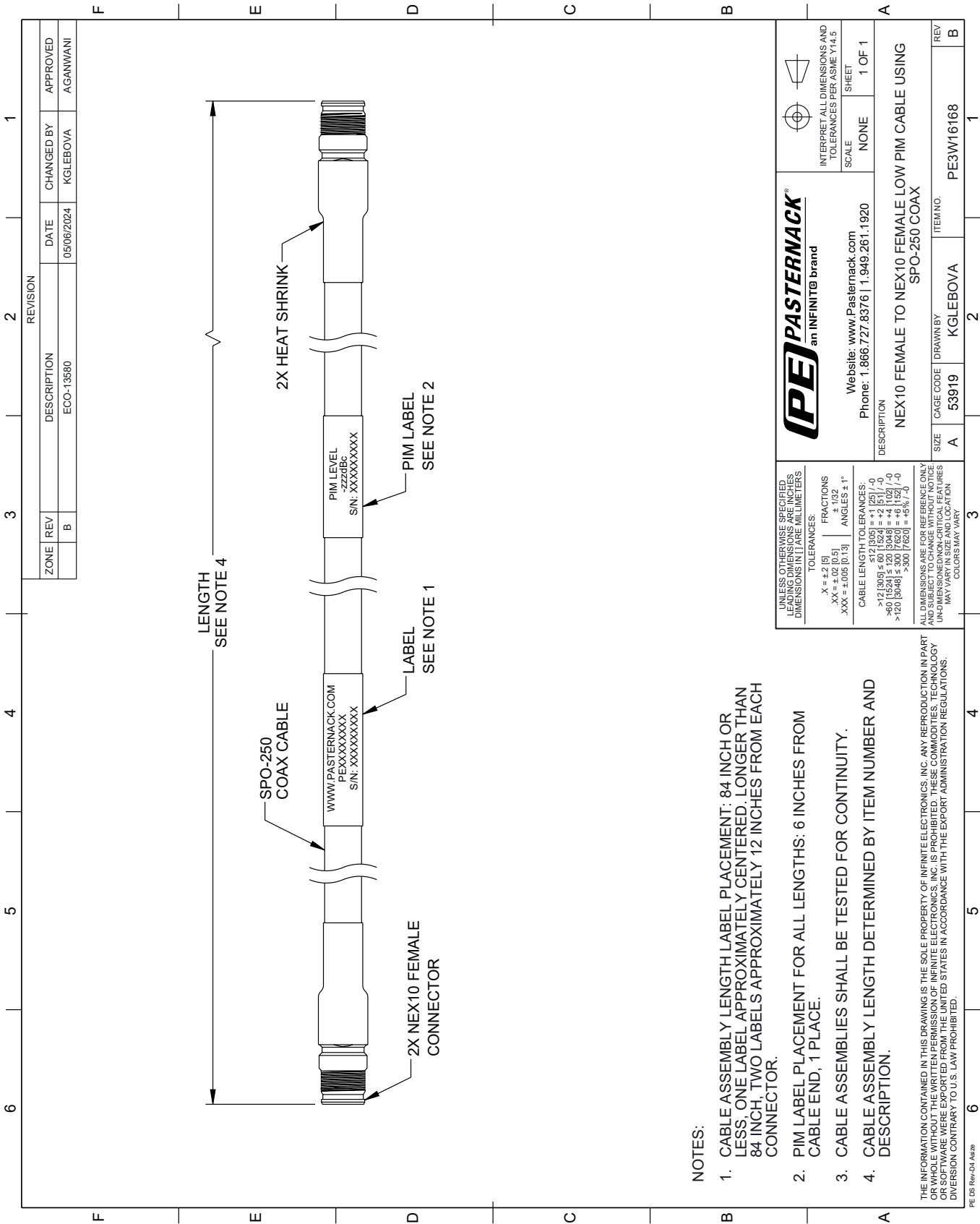
NEX10 Female to NEX10 Female Low PIM Cable Using SPO-250 Coax from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [NEX10 Female to NEX10 Female Low PIM Cable Using SPO-250 Coax PE3W16168](#)

URL: <https://www.pasternack.com/nex10-female-to-nex10-female-low-pim-cable-using-spo-250-pe3w16168-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.

PE3W16168 CAD Drawing
NEX10 Female to NEX10 Female Low PIM Cable Using SPO-250 Coax



- NOTES:
- 1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 84 INCH OR LESS, ONE LABEL APPROXIMATELY CENTERED, LONGER THAN 84 INCH, TWO LABELS APPROXIMATELY 12 INCHES FROM EACH CONNECTOR.
- 2. PIM LABEL PLACEMENT FOR ALL LENGTHS: 6 INCHES FROM CABLE END, 1 PLACE.
- 3. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
- 4. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM NUMBER AND DESCRIPTION.

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TOLERANCES:		Website: www.Pasternack.com		SCALE	
X = ±.2 [5]		Phone: 1.866.727.8376 1.949.261.1920		NONE	
.XX = ±.02 [0.5]		DESCRIPTION		SHEET	
.XXX = ±.005 [0.13]		NEX10 FEMALE TO NEX10 FEMALE LOW PIM CABLE USING SPO-250 COAX		1 OF 1	
CABLE LENGTH TOLERANCES:		SIZE		REV	
>12 [305] ≤ 60 [1524] = ±.125 [-.0]		A		B	
>60 [1524] ≤ 120 [3048] = ±.125 [-.0]		CAGE CODE		ITEM NO.	
>120 [3048] ≤ 300 [7620] = ±.125 [-.0]		53919		PE3W16168	
ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED/NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.		DRAWN BY		1	
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