

## NEX10 Male to 7/16 DIN Female Low PIM Cable Using 1/4 inch Superflexible Coax

### PE3W14438

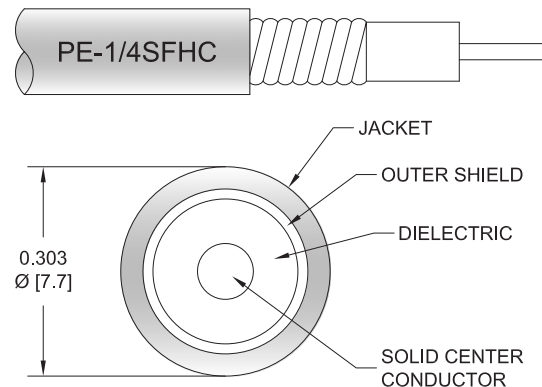


#### Configuration

- Connector 1: NEX10 Male
- Connector 2: 7/16 DIN Female
- Cable Type: 1/4" Superflexible
- Coax Flex Type: Corrugated

#### Features

- Max Frequency 6 GHz
- Low PIM: -160 dBc Max
- Shielding Effectivity > 120 dB
- 82% Phase Velocity
- PE Jacket



#### Applications

- General Purpose
- Laboratory Use
- Low PIM Applications

#### Description

Pasternack's PE3W14438 NEX10 male to 7/16 DIN female cable using 1/4 inch superflexible 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 7/16 DIN cable assembly has a male to female gender configuration with 50 ohm corrugated 1/4" superflexible coax. The PE3W14438 NEX10 male to 7/16 DIN female cable assembly operates to 6 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		6	GHz
VSWR			1.4:1	
Velocity of Propagation		82		%
RF Shielding	120			dB
Passive Intermodulation			-160	dBc
IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz				
Capacitance		24.4 [80.05]		pF/ft [pF/m]
Inductance		0.059 [0.19]		uH/ft [uH/m]
DC Resistance Inner Conductor		3.2 [10.5]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		2.53 [8.3]		Ohms/1000ft [Ohms/Km]
Dielectric Withstanding Voltage (AC)			750	Vrms

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### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			2,000	Vrms

### Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	100	250	500	1000	3000	MHz	
PE3W14438	Custom Lengths Available	Insertion Loss (Typ.)	0.016	0.027	0.039	0.058	0.107	dB/ft	
			0.06	0.09	0.13	0.2	0.36	dB/m	
PE3W14438-12	12 inch	Insertion Loss (Typ.)	0.22	0.23	0.24	0.26	0.31	dB	0.252
PE3W14438-24	24 inch	Insertion Loss (Typ.)	0.24	0.26	0.28	0.32	0.42	dB	0.294
PE3W14438-36	36 inch	Insertion Loss (Typ.)	0.25	0.29	0.32	0.38	0.53	dB	0.336
PE3W14438-48	48 inch	Insertion Loss (Typ.)	0.27	0.31	0.36	0.44	0.63	dB	0.378
PE3W14438-60	60 inch	Insertion Loss (Typ.)	0.28	0.34	0.4	0.49	0.74	dB	0.42

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:	0.252 pounds
Additional Weight per Inch:	0.0035 pounds

### Mechanical Specifications

#### Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.252 lbs [114.31 g]

#### Cable

Cable Type	1/4" Superflexible
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Aluminum
Dielectric Type	PE (F)
Number of Shields	1
Shield Layer 1	Helically Corrugated Copper Tube
Jacket Material	PE, Black
Jacket Diameter	0.303 in [7.7 mm]
One Time Minimum Bend Radius	0.5 in [12.7 mm]
Repeated Minimum Bend Radius	1 in [25.4 mm]
Typical Flex Cycles	20
Tensile Strength	79 lbs [35.83 Kg]

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Cable Using 1/4 inch Superflexible Coax



**PE3W14438**

**Connectors**

Description	Connector 1	Connector 2
Type	NEX10 Male	7/16 DIN Female
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Silver	Beryllium Copper, Silver
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Brass, Tri-Metal
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Material and Plating	Brass, Tri-Metal	

**Environmental Specifications**

Operating Range Temperature -40 to +85 deg C

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

**Plotted and Other Data**

Notes:

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### PE3W14438

#### Typical Performance Data

#### How to Order

Part Number Configuration: **PE3W14438**    **- xx**    **uu**

Unit of Measure:  
cm = Centimeters  
<blank> = Inches

Length

Base Number

Example: PE3W14438-12 = 12 inches long cable  
PE3W14438-100cm = 100 cm long cable

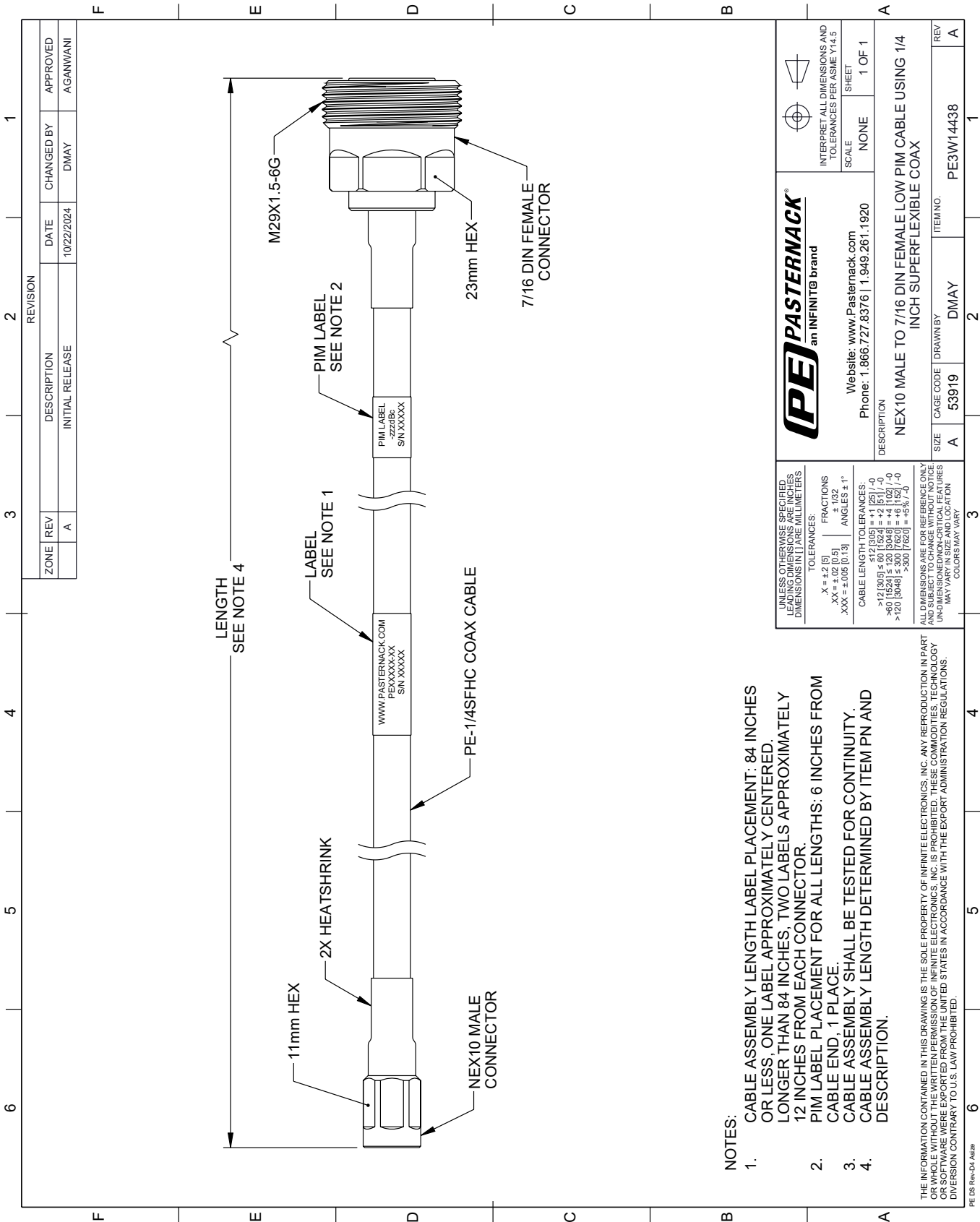
NEX10 Male to 7/16 DIN Female Low PIM Cable Using 1/4 inch Superflexible Coax from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [NEX10 Male to 7/16 DIN Female Low PIM Cable Using 1/4 inch Superflexible Coax PE3W14438](#)

URL: <https://www.pasternack.com/nex10-male-to-7-16-din-female-low-pim-cable-using-1-4-inch-superflexible-pe3w14438-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.

PE3W14438 CAD Drawing
NEX10 Male to 7/16 DIN Female Low PIM Cable Using 1/4 inch Superflexible Coax



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

<b>PE PASTERNAK</b> an INFINITI® brand		Website: www.Pasternack.com Phone: 1.866.727.8376   1.949.261.1920		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	
UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE MILLIMETERS.		TOLERANCES: FRACTIONS: X = ±.2 [5] XX = ±.02 [0.5] XXX = ±.005 [0.13] ANGLES ± 1°		SCALE: NONE	
CABLE LENGTH TOLERANCES: >12 [305] ≤ 60 [1524] = ±.125 [3.18] > 60 [1524] ≤ 120 [3048] = ±.125 [3.18] > 120 [3048] ≤ 300 [7620] = ±.125 [3.18]		CABLE LENGTH TOLERANCES: >12 [305] ≤ 60 [1524] = ±.125 [3.18] > 60 [1524] ≤ 120 [3048] = ±.125 [3.18] > 120 [3048] ≤ 300 [7620] = ±.125 [3.18]		SHEET 1 OF 1	
ALL DIMENSIONS ARE FOR REFERENCE ONLY. DIMENSIONS SHALL BE TO THE CENTER OF THE CABLE UNLESS OTHERWISE SPECIFIED. DIMENSIONS MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.		DESCRIPTION: NEX10 MALE TO 7/16 DIN FEMALE LOW PIM CABLE USING 1/4 INCH SUPERFLEXIBLE COAX		REV A	
ITEM NO. 53919		DRAWN BY DMAY		ITEM NO. PE3W14438	

# Mouser Electronics

Authorized Distributor

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[PE3W14438-36](#)