

## NEX10 Female Bulkhead to NEX10 Female Bulkhead Low PIM Cable Using 1/4 inch Superflexible Coax



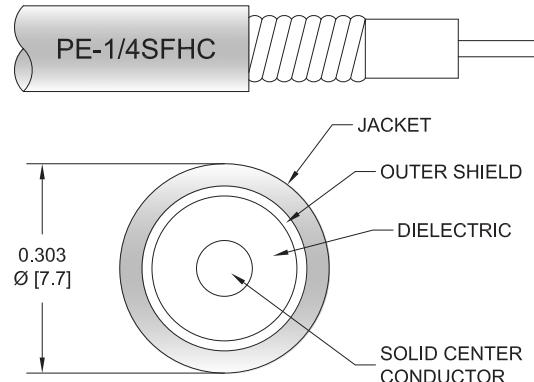
### PE3W17738

#### Configuration

- Connector 1: NEX10 Female Bulkhead
- Connector 2: NEX10 Female Bulkhead
- 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 PE3W17738 NEX10 female bulkhead to NEX10 female bulkhead 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 NEX10 cable assembly has a female to female gender configuration with 50 ohm corrugated 1/4" superflexible coax. The PE3W17738 NEX10 female to NEX10 female cable assembly operates to 6 GHz. Our low PIM design also offers excellent passive intermodulation performance with PIM levels better than -160 dBc. Our RF cable assembly with NEX10 bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications.

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]

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#### Electrical Specifications

Description	Minimum	Typical				Maximum	Units
DC Resistance Outer Conductor	2.53 [8.3]				Ohms/1000ft [Ohms/Km]		
Dielectric Withstanding Voltage (AC)					750		Vrms
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		
PE3W17738	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	
PE3W17738-12	12 inch	Insertion Loss (Typ.)	0.22	0.23	0.24	0.26	0.31	dB	0.082
PE3W17738-24	24 inch	Insertion Loss (Typ.)	0.24	0.26	0.28	0.32	0.42	dB	0.124
PE3W17738-36	36 inch	Insertion Loss (Typ.)	0.25	0.29	0.32	0.38	0.53	dB	0.166
PE3W17738-48	48 inch	Insertion Loss (Typ.)	0.27	0.31	0.36	0.44	0.63	dB	0.208
PE3W17738-60	60 inch	Insertion Loss (Typ.)	0.28	0.34	0.4	0.49	0.74	dB	0.25

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: 0.082 pounds  
Additional Weight per Inch: 0.0035 pounds

#### Mechanical Specifications

##### Cable Assembly

Width/Diameter 0.5 in [12.7 mm]  
Weight 0.082 lbs [37.19 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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**PE3W17738**

### Connectors

Description	Connector 1	Connector 2
Type	NEX10 Female Bulkhead	NEX10 Female Bulkhead
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

### 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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### PE3W17738

#### Typical Performance Data

#### How to Order

Part Number Configuration:

PE3W17738 - xx uu

Legend:

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

Example: PE3W17738-12 = 12 inches long cable  
PE3W17738-100cm = 100 cm long cable

NEX10 Female Bulkhead to NEX10 Female Bulkhead 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 Female Bulkhead to NEX10 Female Bulkhead Low PIM Cable Using 1/4 inch Superflexible Coax PE3W17738](#)

URL: <https://www.pasternack.com/nex10-female-bulkhead-to-nex10-female-bulkhead-low-pim-cable-using-1-4-inch-superflexible-pe3w17738-p.aspx>

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# PE3W17738 CAD Drawing

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