

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

PE3W17738

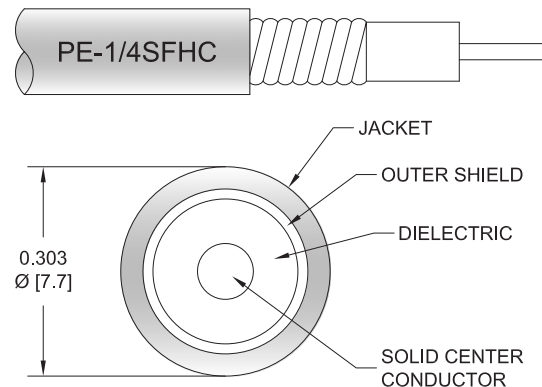


Configuration

- 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 IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz | | | -160 | dBc |
| 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 | MHz | |
| 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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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

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- 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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