

## 1.85mm Male to 3.5mm Female Bulkhead Cable Using PE-SR405FL Coax

### PE3C10752

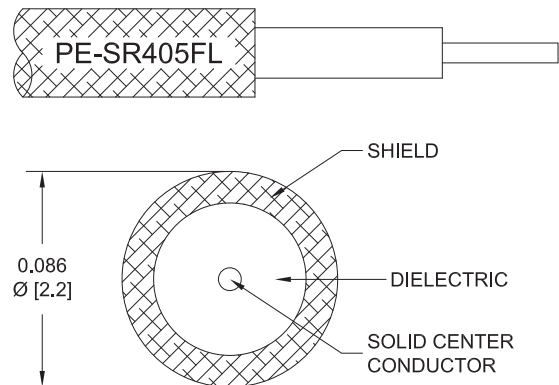


#### Configuration

- Connector 1: 1.85mm Male
- Connector 2: 3.5mm Female Bulkhead
- Cable Type: PE-SR405FL
- Coax Flex Type: Formable

#### Features

- Max Frequency 20 GHz
- 69.5% Phase Velocity
- 500 Mating Cycles



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3C10752 1.85mm male to 3.5mm female bulkhead cable using PE-SR405FL coax is part of our full line of RF components available for same-day shipping. Pasternack's formable RF cable assemblies provide an alternative to costly pre-formed semi-rigid assemblies since they are hand formable. This Pasternack 1.85mm to 3.5mm cable assembly has a male to female gender configuration with 50 ohm formable PE-SR405FL coax. The PE3C10752 1.85mm male to 3.5mm female cable assembly operates to 20 GHz. Our RF cable assembly with 3.5mm 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      |               | 20      | GHz                   |
| VSWR                          |         |               | 1.4:1   |                       |
| Velocity of Propagation       |         | 69.5          |         | %                     |
| Capacitance                   |         | 29 [95.14]    |         | pF/ft [pF/m]          |
| DC Resistance Inner Conductor |         | 65.7 [215.55] |         | Ohms/1000ft [Ohms/Km] |
| DC Resistance Outer Conductor |         | 10.2 [33.46]  |         | Ohms/1000ft [Ohms/Km] |

#### Specifications by Frequency

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| Part Number  | Length                   | Description           | F1    | F2    | F3    | F4    | F5    | Units | Weight (lbs) |
|--------------|--------------------------|-----------------------|-------|-------|-------|-------|-------|-------|--------------|
|              |                          | Frequency             | 1000  | 2000  | 4500  | 9000  | 20000 | MHz   |              |
| PE3C10752    | Custom Lengths Available | Insertion Loss (Typ.) | 0.225 | 0.306 | 0.508 | 0.759 | 1.2   | dB/ft |              |
|              |                          |                       | 0.74  | 1.01  | 1.67  | 2.5   | 3.94  | dB/m  |              |
| PE3C10752-6  | 6 In                     | Insertion Loss (Typ.) | 0.26  | 0.31  | 0.44  | 0.6   | 0.88  | dB    | 0.035        |
| PE3C10752-9  | 9 In                     | Insertion Loss (Typ.) | 0.31  | 0.39  | 0.57  | 0.79  | 1.18  | dB    | 0.038        |
| PE3C10752-12 | 12 In                    | Insertion Loss (Typ.) | 0.37  | 0.47  | 0.7   | 0.98  | 1.48  | dB    | 0.04         |
| PE3C10752-18 | 18 In                    | Insertion Loss (Typ.) | 0.48  | 0.62  | 0.95  | 1.36  | 2.08  | dB    | 0.046        |
| PE3C10752-24 | 24 In                    | Insertion Loss (Typ.) | 0.59  | 0.77  | 1.21  | 1.74  | 2.68  | dB    | 0.051        |

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: 0.04\*SQRT(FGHz) dB

Loss due to Connector 2: 0.1 dB

Base Weight: 0.04 pounds

Additional Weight per Inch: 0.00084 pounds

### Mechanical Specifications

#### Cable Assembly

Width/Diameter

0.5 in [12.7 mm]

Weight

0.04 lbs [18.14 g]

#### Cable

Cable Type

PE-SR405FL

Impedance

50 Ohms

Inner Conductor Type

Solid

Inner Conductor Material and Plating

Copper Clad Steel, Silver

Dielectric Type

PTFE

Number of Shields

1

Outer Conductor 1 Material and Plating

Copper, Tin

Repeated Minimum Bend Radius

0.78 in [19.81 mm]

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#### Connectors

| Description                        | Connector 1                        | Connector 2                                    |
|------------------------------------|------------------------------------|------------------------------------------------|
| Type                               | 1.85mm Male                        | 3.5mm Female Bulkhead                          |
| Impedance                          | 50 Ohms                            | 50 Ohms                                        |
| Configuration                      | Straight                           | Straight                                       |
| Mating Cycles                      | 500                                | 500                                            |
| Contact Material and Plating       | Beryllium Copper, Gold over Nickel | Beryllium Copper, Gold over Nickel over Copper |
| Contact Plating Specification      | 50 µin minimum                     |                                                |
| Dielectric Type                    | PEI                                | PPO                                            |
| Body Material and Plating          | Beryllium Copper, Gold over Nickel | Stainless Steel, Passivated                    |
| Body Plating Specification         | 50 µin minimum                     |                                                |
| Coupling Nut Material and Plating  | Passivated Stainless Steel         | Stainless Steel, Passivated                    |
| Coupling Nut Plating Specification | ASTM-A582                          |                                                |
| Hex Size                           | 5/16 inch                          |                                                |
| Torque                             | 8 in-lbs 0.9 Nm                    | 7.1 in-lbs 0.8 Nm                              |

#### Environmental Specifications

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

#### Plotted and Other Data

Notes:

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### PE3C10752

#### Typical Performance Data

#### How to Order

Part Number Configuration: **PE3C10752 - xx uu**

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

Length

Base Number

Example: PE3C10752-12 = 12 inches long cable  
PE3C10752-100cm = 100 cm long cable

1.85mm Male to 3.5mm Female Bulkhead Cable Using PE-SR405FL 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: [1.85mm Male to 3.5mm Female Bulkhead Cable Using PE-SR405FL Coax PE3C10752](https://www.pasternack.com/1.85mm-male-to-3.5mm-female-bulkhead-cable-using-pe-sr405fl-pe3c10752-p.aspx)

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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.

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