

## Fire Rated 4.3-10 Male to 4.3-10 Male Low Loss Cable Using TCOM-400-FR Coax With Times Microwave Components



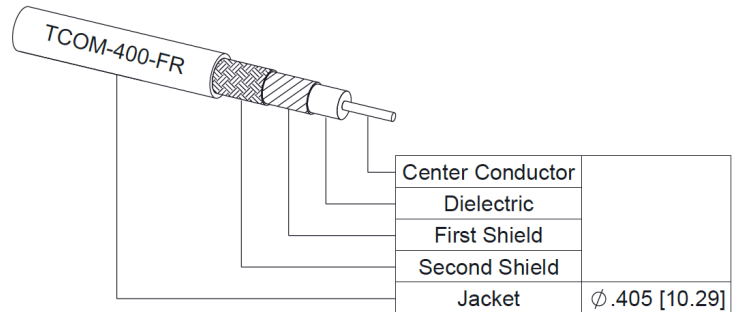
### PE3C10411

#### Configuration

- Connector 1: 4.3-10 Male
- Connector 2: 4.3-10 Male
- Cable Type: TCOM-400-FR
- Coax Flex Type: Flexible

#### Features

- Max Frequency 6 GHz
- Shielding Effectivity > 100 dB
- 85% Phase Velocity
- Double Shielded
- PE Jacket
- 500 Mating Cycles



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3C10411 4.3-10 male to 4.3-10 male cable using TCOM-400-FR coax is part of our full line of RF components available for same-day shipping. Pasternack's flexible RF cable assemblies are ideal for applications where tight bends and flexure are required. This Pasternack 4.3-10 to 4.3-10 cable assembly has a male to male gender configuration with 50 ohm flexible TCOM-400-FR coax. The PE3C10411 4.3-10 male to 4.3-10 male cable assembly operates to 6 GHz. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 100 dB.

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       |         | 85           |         | %                     |
| RF Shielding                  | 100     |              |         | dB                    |
| Group Delay                   |         | 1.2 [3.94]   |         | ns/ft [ns/m]          |
| Capacitance                   |         | 23.9 [78.41] |         | pF/ft [pF/m]          |
| Inductance                    |         | 0.06 [0.2]   |         | uH/ft [uH/m]          |
| DC Resistance Inner Conductor |         | 1.39 [4.56]  |         | Ohms/1000ft [Ohms/Km] |
| DC Resistance Outer Conductor |         | 1.47 [4.82]  |         | Ohms/1000ft [Ohms/Km] |

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#### Electrical Specifications

| Description  | Minimum | Typical | Maximum | Units |
|--------------|---------|---------|---------|-------|
| Jacket Spark |         |         | 8,000   | Vrms  |

#### Specifications by Frequency

| Part Number  | Length                   | Description           | F1    | F2   | F3    | F4    | F5    | Units | Weight (lbs) |
|--------------|--------------------------|-----------------------|-------|------|-------|-------|-------|-------|--------------|
|              |                          | Frequency             | 250   | 500  | 1000  | 2500  | 6000  | MHz   |              |
| PE3C10411    | Custom Lengths Available | Insertion Loss (Typ.) | 0.021 | 0.03 | 0.044 | 0.072 | 0.117 | dB/ft |              |
|              |                          |                       | 0.07  | 0.1  | 0.15  | 0.24  | 0.39  | dB/m  |              |
| PE3C10411-12 | 12 inch                  | Insertion Loss (Typ.) | 0.23  | 0.23 | 0.25  | 0.28  | 0.32  | dB    | 0.272        |
| PE3C10411-24 | 24 inch                  | Insertion Loss (Typ.) | 0.25  | 0.26 | 0.29  | 0.35  | 0.44  | dB    | 0.352        |
| PE3C10411-36 | 36 inch                  | Insertion Loss (Typ.) | 0.27  | 0.29 | 0.34  | 0.42  | 0.56  | dB    | 0.432        |
| PE3C10411-48 | 48 inch                  | Insertion Loss (Typ.) | 0.29  | 0.32 | 0.38  | 0.49  | 0.67  | dB    | 0.512        |
| PE3C10411-60 | 60 inch                  | Insertion Loss (Typ.) | 0.31  | 0.35 | 0.42  | 0.56  | 0.79  | dB    | 0.592        |

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:                | 0.272 pounds   |
| Additional Weight per Inch: | 0.00666 pounds |

#### Mechanical Specifications

##### Cable Assembly

|                |                      |
|----------------|----------------------|
| Width/Diameter | 0.5 in [12.7 mm]     |
| Weight         | 0.272 lbs [123.38 g] |

##### Cable

|                                      |                            |
|--------------------------------------|----------------------------|
| Cable Type                           | TCOM-400-FR                |
| Impedance                            | 50 Ohms                    |
| Inner Conductor Type                 | Solid                      |
| Inner Conductor Material and Plating | Copper Clad Aluminum       |
| Dielectric Type                      | PE (F)                     |
| Number of Shields                    | 2                          |
| Shield Layer 1                       | Silver Plated Copper Braid |
| Shield Layer 2                       | Tinned Copper Braid        |
| Jacket Material                      | PE, Black                  |
| Jacket Diameter                      | 0.405 in [10.29 mm]        |
| One Time Minimum Bend Radius         | 1 in [25.4 mm]             |
| Repeated Minimum Bend Radius         | 4 in [101.6 mm]            |
| Bending Moment                       | 0.5 lbs-ft [0.68 N-m]      |
| Flat Plate Crush                     | 40 lbs/in [0.71 Kg/mm]     |
| Tensile Strength                     | 160 lbs [72.57 Kg]         |

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#### Connectors

| Description                       | Connector 1      | Connector 2      |
|-----------------------------------|------------------|------------------|
| Type                              | 4.3-10 Male      | 4.3-10 Male      |
| Impedance                         | 50 Ohms          | 50 Ohms          |
| Configuration                     | Straight         | Straight         |
| Mating Cycles                     | 500              | 500              |
| Contact Material and Plating      | Brass, Silver    | Brass, Silver    |
| Dielectric Type                   | PTFE             | PTFE             |
| Body Material and Plating         | Brass, Tri-Metal | Brass, Tri-Metal |
| Coupling Nut 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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### PE3C10411

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**PE3C10411**

**- xx**

**uu**

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3C10411-12 = 12 inches long cable  
PE3C10411-100cm = 100 cm long cable

Fire Rated 4.3-10 Male to 4.3-10 Male Low Loss Cable Using TCOM-400-FR Coax With Times Microwave Components 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: [Fire Rated 4.3-10 Male to 4.3-10 Male Low Loss Cable Using TCOM-400-FR Coax With Times Microwave Components PE3C10411](#)

URL: <https://www.pasternack.com/fire-rated-4.3-10-male-to-4.3-10-male-low-loss-cable-using-tcom-400-fr-pe3c10411-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.

PE3C10411 CAD Drawing

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