

## Fire Rated 4.3-10 Male to 4.3-10 Male Low PIM Cable Using SPF-500 Coax Using Times Microwave Parts



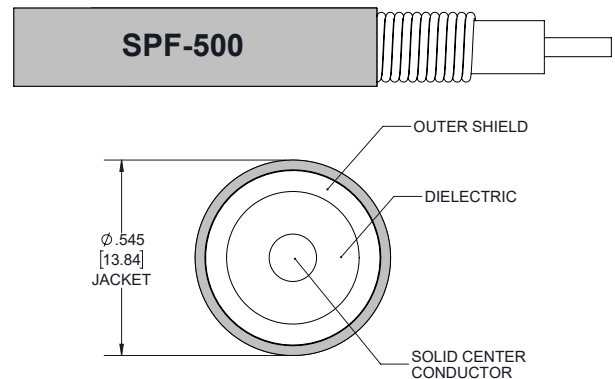
### PE3C6516

#### Configuration

- Connector 1: 4.3-10 Male TC-SPP500-4310M-LP
- Connector 2: 4.3-10 Male TC-SPP500-4310M-LP
- Cable Type: SPF-500
- Coax Flex Type: Corrugated

#### Features

- Max Frequency 6 GHz
- Low PIM: -158 dBc Max
- 83% Phase Velocity
- FRPE Jacket
- 100% Tested with PIM Test Results Marked on Cable
- Lightweight and Extremely Flexible
- Low Loss with Excellent VSWR
- IP67 (when mated)
- Using Times Microwave Components



#### Applications

- General Purpose
- Laboratory Use
- Low PIM Applications
- Distributed Antenna Systems (DAS)
- Multi-Carrier Communication Systems
- PIM Testing

#### Description

Pasternack's PE3C6516 4.3-10 male to 4.3-10 male cable using SPF-500 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 4.3-10 to 4.3-10 cable assembly has a male to male gender configuration with 50 ohm corrugated SPF-500 coax. The PE3C6516 4.3-10 male to 4.3-10 male cable assembly operates to 6 GHz. Our low PIM design also offers excellent passive intermodulation performance with PIM levels better than -158 dBc. Times Microwave cable is used in each assembly and TMS components are used to form connections with the super flexible low PIM cable. These cable assemblies are expertly built to satisfy your specific need with high quality Times Microwave Systems manufactured parts.

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                    |         | 83      |         | %     |
| Passive Intermodulation                    |         |         | -158    | dBc   |
| IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz |         |         |         |       |

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#### Electrical Specifications

| Description | Minimum | Typical    | Maximum | Units        |
|-------------|---------|------------|---------|--------------|
| Capacitance |         | 24 [78.74] |         | pF/ft [pF/m] |

#### Specifications by Frequency

| Description           | F1    | F2    | F3    | F4    | F5 | Units |
|-----------------------|-------|-------|-------|-------|----|-------|
| Frequency             | 0.5   | 1     | 2     | 6     |    | GHz   |
| Insertion Loss (Max.) | 0.024 | 0.035 | 0.051 | 0.096 |    | dB/ft |
|                       | 0.08  | 0.11  | 0.17  | 0.31  |    | dB/m  |

Electrical Specification Notes:

PIM test results vary between cables

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as  $0.1 \cdot \sqrt{\text{FGHz}}$  dB per connector.

#### Mechanical Specifications

##### Cable Assembly

|                |                     |
|----------------|---------------------|
| Width/Diameter | 1.14 in [28.96 mm]  |
| Weight         | 0.31 lbs [140.61 g] |

##### Cable

|  |                                  |
|--|----------------------------------|
| Cable Type                             | SPF-500                          |
| Impedance                              | 50 Ohms                          |
| Inner Conductor Type                   | Solid                            |
| Inner Conductor Material and Plating   | Copper Clad Aluminum             |
| Dielectric Type                        | Foam PE                          |
| Number of Shields                      | 1                                |
| Shield Layer 1                         | Helically Corrugated Copper Tube |
| Outer Conductor 1 Material and Plating | Copper                           |
| Jacket Material                        | FRPE, Black                      |
| Jacket Diameter                        | 0.545 in [13.84 mm]              |
| One Time Minimum Bend Radius           | 2.25 in [57.15 mm]               |

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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         |
| Contact Material and Plating       | Brass, Silver    | Brass, Silver    |
| Contact Plating Specification      | 200 µin          | 200 µin          |
| Dielectric Type                    | PTFE             | PTFE             |
| Body Material and Plating          | Brass, Tri-Metal | Brass, Tri-Metal |
| Body Plating Specification         | 80 µin           | 80 µin           |
| Coupling Nut Material and Plating  | Brass, Tri-Metal | Brass, Tri-Metal |
| Coupling Nut Plating Specification | 80 µin           | 80 µin           |

#### Environmental Specifications

|                                    |                  |
|------------------------------------|------------------|
| Operating Range Temperature        | -40 to +85 deg C |
| Environmental Specification Notes: |                  |
| CMR (Riser) Fire Rated             |                  |

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

#### Plotted and Other Data

Notes:  
Values at 25°C, sea level.

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## PE3C6516

### Typical Performance Data



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### PE3C6516

#### How to Order

Part Number Configuration:

**PE3C6516**

**- xx**

**uu**

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

Example: PE3C6516-12 = 12 inches long cable  
PE3C6516-100cm = 100 cm long cable

Fire Rated 4.3-10 Male to 4.3-10 Male Low PIM Cable Using SPF-500 Coax Using Times Microwave Parts 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 PIM Cable Using SPF-500 Coax Using Times Microwave Parts PE3C6516](#)

URL: <https://www.pasternack.com/4.3-10-male-4.3-10-male-spf500-cable-assembly-pe3c6516-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.

PE3C6516 CAD Drawing

Fire Rated 4.3-10 Male to 4.3-10 Male Low PIM Cable Using SPF-500 Coax Using Times Microwave Parts

