

# 2.92mm Female to 2.92mm Female Cable Using PE-118SR Semi-Rigid Coax

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# PE3C10453

# Configuration

Connector 1: 2.92mm Female
Connector 2: 2.92mm Female
Cable Type: PE-118SR
Coax Flex Type: Semi-Rigid

### **Features**

Max Frequency 40 GHz500 Mating Cycles

# OUTER CONDUCTOR 0.118 Ø [3.0] SOLID CENTER CONDUCTOR

# **Applications**

· General Purpose

· Laboratory Use

# **Description**

Pasternack's PE3C10453 2.92mm female to 2.92mm female cable using PE-118SR coax is part of our full line of RF components available for same-day shipping. Pasternack's semi-rigid RF cable assemblies are ideal for high performance applications and can be formed, using proper tooling, to the routing pattern required. This Pasternack 2.92mm to 2.92mm cable assembly has a female to female gender configuration with 50 ohm semi-rigid PE-118SR coax. The PE3C10453 2.92mm female to 2.92mm female cable assembly operates to 40 GHz.

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      |         | 40      | GHz   |
| VSWR            |         |         | 1.4:1   |       |

## Specifications by Frequency



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| Part Number  | Length                          | Description           | F1    | F2    | F3    | F4    | Units | Weight (lbs) |
|--------------|---------------------------------|-----------------------|-------|-------|-------|-------|-------|--------------|
|              |                                 | Frequency             | 2500  | 5000  | 10000 | 20000 | MHz   |              |
| PE3C10453    | Custom Lengths                  | Insertion Loss (Typ.) | 0.175 | 0.258 | 0.425 | 0.625 | dB/ft |              |
| 1 23010433   | Available Hisertion Loss (Typ.) | 0.58                  | 0.85  | 1.4   | 2.06  | dB/m  |       |              |
| PE3C10453-6  | 6 Inch                          | Insertion Loss (Typ.) | 0.29  | 0.33  | 0.42  | 0.52  | dB    | 0.042        |
| PE3C10453-12 | 12 Inch                         | Insertion Loss (Typ.) | 0.38  | 0.46  | 0.63  | 0.83  | dB    | 0.053        |
| PE3C10453-18 | 18 Inch                         | Insertion Loss (Typ.) | 0.47  | 0.59  | 0.84  | 1.14  | dB    | 0.065        |
| PE3C10453-24 | 24 Inch                         | Insertion Loss (Typ.) | 0.55  | 0.72  | 1.05  | 1.45  | dB    | 0.076        |
| PE3C10453-36 | 36 Inch                         | Insertion Loss (Typ.) | 0.73  | 0.98  | 1.48  | 2.08  | dB    | 0.099        |

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: 0.053 pounds
Additional Weight per Inch: 0.00188 pounds

# **Mechanical Specifications**

# Cable Assembly

 Width/Diameter
 0.5 in [12.7 mm]

 Weight
 0.053 lbs [24.04 g]

# Cable

Cable TypePE-118SRImpedance50 OhmsInner Conductor TypeSolidInner Conductor Material and PlatingCopper, Silver

Dielectric TypePTFE (LD)Number of Shields1Shield Layer 1CopperJacket MaterialTan

One Time Minimum Bend Radius 0.4 in [10.16 mm]

### **Connectors**

| Description                  | Connector 1                             | Connector 2                             |  |  |  |
|------------------------------|---|---|--|--|--|
| Туре                         | 2.92mm Female                           | 2.92mm Female                           |  |  |  |
| Impedance                    | 50 Ohms                                 | 50 Ohms                                 |  |  |  |
| Configuration                | Straight                                | Straight                                |  |  |  |
| Mating Cycles                | 500                                     | 500                                     |  |  |  |
| Contact Material and Plating | Beryllium Copper, Gold over Nickel over | Beryllium Copper, Gold over Nickel over |  |  |  |
|                              | Copper                                  | Copper                                  |  |  |  |
| Dielectric Type              | PPO                                     | PPO                                     |  |  |  |
| Body Material and Plating    | Stainless Steel, Passivated             | Stainless Steel, Passivated             |  |  |  |



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# **Environmental Specifications**

Operating Range Temperature

-40 to +105 deg C

**Compliance Certifications** (see product page for current document)

**Plotted and Other Data** 

Notes:

**Typical Performance Data** 

**How to Order** 

Part Number Configuration:

PE3C10453 - xx uu

Unit of Measure:
cm = Centimeters
<br/>
<br/>
<br/>
clanck > = Inches

Example: PE3C10453-12 = 12 inches long cable

PE3C10453-100cm = 100 cm long cable

2.92mm Female to 2.92mm Female Cable Using PE-118SR Semi-Rigid 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: 2.92mm Female to 2.92mm Female Cable Using PE-118SR Semi-Rigid Coax PE3C10453

URL: https://www.pasternack.com/2.92mm-female-to-2.92mm-female-cable-using-pe-118sr-pe3c10453-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 impliment 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.

Base Number

