

## SMA Male to SMA Male Non-Magnetic Cable Using PE-SR405-NM Coax



### PE3C10857

#### Configuration

- Connector 1: SMA Male
- Connector 2: SMA Male
- Cable Type: PE-SR405-NM
- Coax Flex Type: Semi-Rigid

#### Features

- Max Frequency 18 GHz
- Shielding Effectivity > 165 dB
- 69.5% Phase Velocity

#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3C10857 SMA male to SMA male cable using PE-SR405-NM 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 SMA to SMA cable assembly has a male to male gender configuration with 50 ohm semi-rigid PE-SR405-NM coax. The PE3C10857 SMA male to SMA male cable assembly operates to 18 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      |         | 18      | GHz   |
| VSWR                    |         |         | 1.4:1   |       |
| Velocity of Propagation |         | 69.5    |         | %     |
| RF Shielding            | 165     |         |         | dB    |

#### Specifications by Frequency

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| Part Number  | Length                   | Description           | F1    | F2    | F3    | F4    | F5    | Units | Weight (lbs) |
|--------------|--------------------------|-----------------------|-------|-------|-------|-------|-------|-------|--------------|
|              |                          | Frequency             | 1000  | 2000  | 4500  | 9000  | 18000 | MHz   |              |
| PE3C10857    | Custom Lengths Available | Insertion Loss (Typ.) | 0.195 | 0.261 | 0.426 | 0.636 | 0.94  | dB/ft |              |
|              |                          |                       | 0.64  | 0.86  | 1.4   | 2.09  | 3.09  | dB/m  |              |
| PE3C10857-6  | 6 inch                   | Insertion Loss (Typ.) | 0.52  | 0.56  | 0.64  | 0.74  | 0.89  | dB    | 0.11         |
| PE3C10857-12 | 12 inch                  | Insertion Loss (Typ.) | 0.62  | 0.69  | 0.85  | 1.06  | 1.36  | dB    | 0.018        |
| PE3C10857-18 | 18 inch                  | Insertion Loss (Typ.) | 0.72  | 0.82  | 1.06  | 1.38  | 1.83  | dB    | 0.026        |
| PE3C10857-24 | 24 inch                  | Insertion Loss (Typ.) | 0.81  | 0.95  | 1.28  | 1.7   | 2.3   | dB    | 0.033        |
| PE3C10857-36 | 36 inch                  | Insertion Loss (Typ.) | 1.01  | 1.21  | 1.7   | 2.33  | 3.24  | dB    | 0.047        |

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:    | 0.21 dB        |
| Loss due to Connector 2:    | 0.21 dB        |
| Base Weight:                | 0.018 pounds   |
| Additional Weight per Inch: | 0.00117 pounds |

## Mechanical Specifications

### Cable Assembly

|                |                    |
|----------------|--------------------|
| Width/Diameter | 0.5 in [12.7 mm]   |
| Weight         | 0.018 lbs [8.16 g] |

### Cable

|                                        |                    |
|----------------------------------------|--------------------|
| Cable Type                             | PE-SR405-NM        |
| Impedance                              | 50 Ohms            |
| Inner Conductor Type                   | Solid              |
| Inner Conductor Material and Plating   | Copper, Silver     |
| Dielectric Type                        | PTFE               |
| Outer Conductor 1 Material and Plating | Copper             |
| One Time Minimum Bend Radius           | 0.125 in [3.18 mm] |

## Connectors

| Description                        | Connector 1 | Connector 2 |
|------------------------------------|-------------|-------------|
| Type                               | SMA Male    | SMA Male    |
| Impedance                          | 50 Ohms     | 50 Ohms     |
| Configuration                      | Straight    | Straight    |
| Contact Material and Plating       | Gold        | Gold        |
| Contact Plating Specification      | MIL-G-45294 | MIL-G-45294 |
| Dielectric Type                    | PTFE        | PTFE        |
| Body Material and Plating          | Brass, Gold | Brass, Gold |
| Body Plating Specification         | ASTM-B-16   | ASTM-B-16   |
| Coupling Nut Material and Plating  | Brass, Gold | Brass, Gold |
| Coupling Nut Plating Specification | ASTM-B-16   | ASTM-B-16   |

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### PE3C10857

#### Environmental Specifications

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

#### Plotted and Other Data

Notes:

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**PE3C10857 - xx uu**

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

Example: PE3C10857-12 = 12 inches long cable  
PE3C10857-100cm = 100 cm long cable

SMA Male to SMA Male Non-Magnetic Cable Using PE-SR405-NM 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: [SMA Male to SMA Male Non-Magnetic Cable Using PE-SR405-NM Coax PE3C10857](#)

URL: <https://www.pasternack.com/sma-male-to-sma-male-non-magnetic-cable-using-pe-sr405-nm-pe3c10857-p.aspx>

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PE3C10857 CAD Drawing
SMA Male to SMA Male Non-Magnetic Cable Using PE-SR405-NM Coax

