

SMA Male to SMA Female Bulkhead Cable Using PE-SR405FL Coax



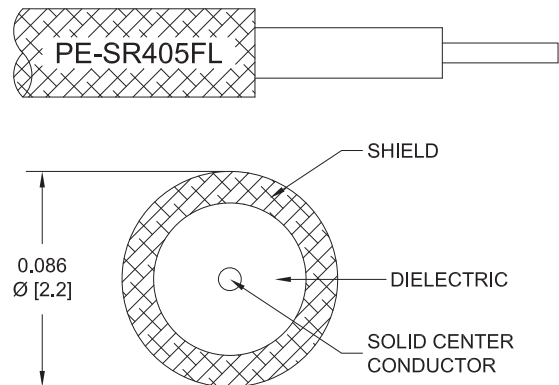
PE3C3944

Configuration

- Connector 1: SMA Male
- Connector 2: SMA Female Bulkhead
- Cable Type: PE-SR405FL
- Coax Flex Type: Formable

Features

- Max Frequency 18 GHz
- 69.5% Phase Velocity



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C3944 SMA male to SMA 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 SMA to SMA cable assembly has a male to female gender configuration with 50 ohm formable PE-SR405FL coax. The PE3C3944 SMA male to SMA female cable assembly operates to 18 GHz. Our RF cable assembly with SMA 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 | | 18 | 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

SMA Male to SMA Female Bulkhead
Cable Using PE-SR405FL Coax



PE3C3944

| Part Number | Length | Description | F1 | F2 | F3 | F4 | F5 | Units | Weight (lbs) |
|-------------|--------------------------|-----------------------|-----------|------|-------|-------|-------|-------|--------------|
| | | | Frequency | | 1000 | 2000 | 4500 | 9000 | |
| PE3C3944 | Custom Lengths Available | Insertion Loss (Typ.) | 0.23 | 0.31 | 0.508 | 0.759 | 1.122 | dB/ft | |
| | | | 0.74 | 1.01 | 1.67 | 2.5 | 3.69 | dB/m | |
| PE3C3944-6 | 6 inch | Insertion Loss (Typ.) | 0.32 | 0.36 | 0.46 | 0.58 | 0.77 | dB | 0.026 |
| PE3C3944-9 | 9 inch | Insertion Loss (Typ.) | 0.37 | 0.43 | 0.59 | 0.77 | 1.05 | dB | 0.029 |
| PE3C3944-12 | 12 inch | Insertion Loss (Typ.) | 0.43 | 0.51 | 0.71 | 0.96 | 1.33 | dB | 0.031 |
| PE3C3944-24 | 24 inch | Insertion Loss (Typ.) | 0.65 | 0.82 | 1.22 | 1.72 | 2.45 | dB | 0.043 |
| PE3C3944-36 | 36 inch | Insertion Loss (Typ.) | 0.88 | 1.12 | 1.73 | 2.48 | 3.57 | dB | 0.054 |

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: 0.031 pounds
 Additional Weight per Inch: 0.00092 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter: 0.5 in [12.7 mm]
 Weight: 0.031 lbs [14.06 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 | SMA Male | SMA Female Bulkhead |
| Specification | MIL-STD-348A | |
| Impedance | 50 Ohms | 50 Ohms |
| Configuration | Straight | Straight |
| Mating Cycles | 500 | |
| Contact Material and Plating | Brass, Gold | Beryllium Copper, Gold over Nickel |
| Contact Plating Specification | 50 µin minimum | |
| Dielectric Type | PTFE | PTFE |
| Body Material and Plating | Stainless Steel, Gold | Brass, Gold over Nickel |
| Body Plating Specification | 10 µin minimum | |
| Coupling Nut Material and Plating | Brass, Nickel | |
| Coupling Nut Plating Specification | 100 µin minimum | |
| Hex Size | 5/16 in. | |
| Torque | 5 in-lbs 0.57 Nm | |
| Seal Gasket Material | Silicone | |

Environmental Specifications

Operating Range Temperature -65 to +165 deg C

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

Plotted and Other Data

Notes:

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PE3C3944

Typical Performance Data

How to Order

Part Number Configuration:

PE3C3944

- **xx**

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

Example: PE3C3944-12 = 12 inches long cable
PE3C3944-100cm = 100 cm long cable

SMA Male to SMA 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.

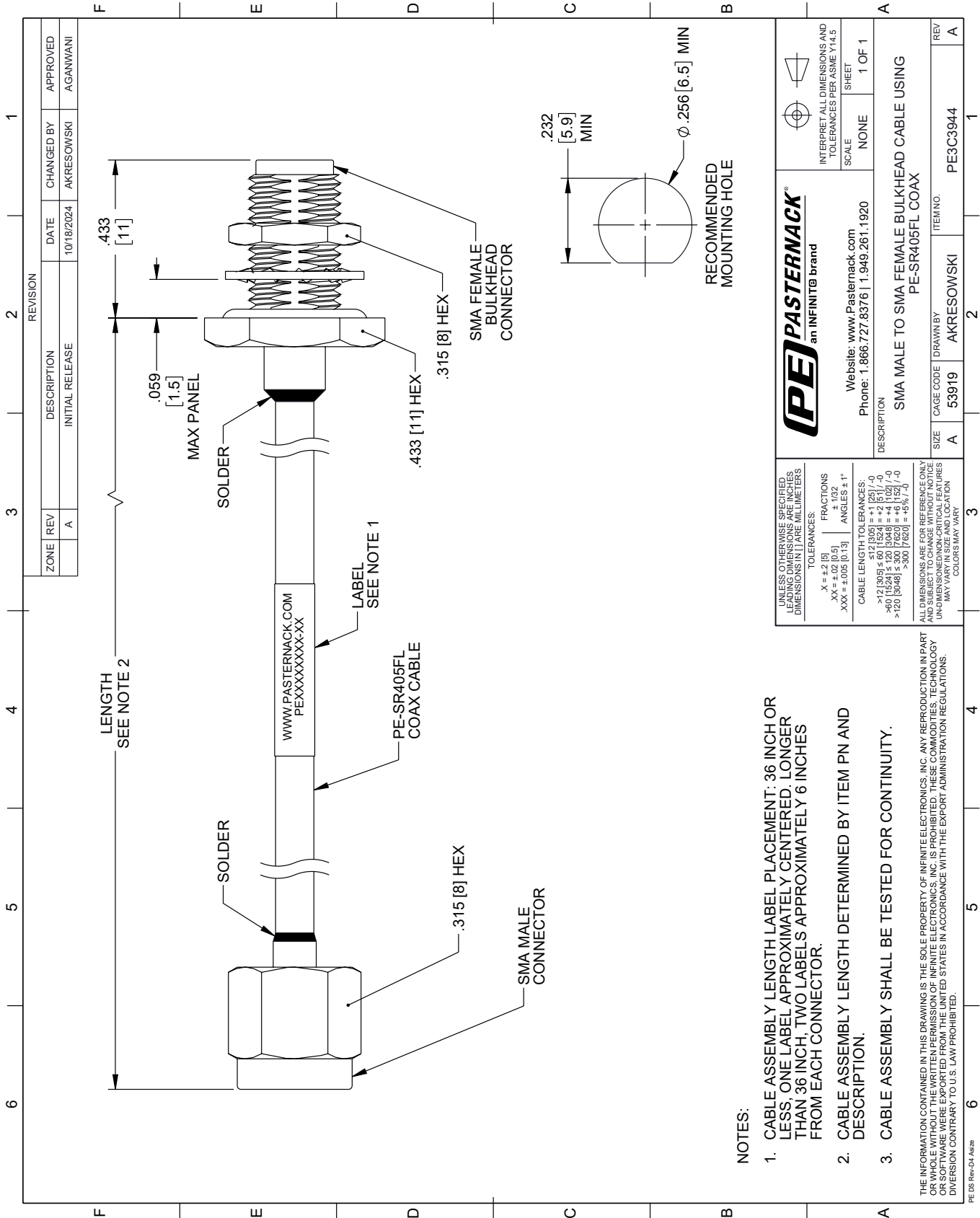
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to SMA Female Bulkhead Cable Using PE-SR405FL Coax PE3C3944](#)

URL: <https://www.pasternack.com/sma-male-to-sma-female-bulkhead-cable-using-pe-sr405fl-pe3c3944-p.aspx>

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PE3C3944 CAD Drawing

SMA Male to SMA Female Bulkhead Cable Using PE-SR405FL Coax



NOTES:

1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCH OR LESS, ONE LABEL APPROXIMATELY CENTERED, LONGER THAN 36 INCH, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
2. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.
3. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.

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UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS.

TOLERANCES:

| | |
|---------------------|-------------|
| .X = ±.2 [5] | FRACTIONS |
| .XX = ±.02 [0.5] | ± 1/32 |
| .XXX = ±.005 [0.13] | ANGLES ± 1° |

CABLE LENGTH TOLERANCES:

| | |
|-------------------------|--------------|
| <12 [305] | ±.60 [15.24] |
| >12 [305] ≤ 60 [1524] | ±.25 [6.35] |
| >60 [1524] ≤ 120 [3048] | ±.40 [10.16] |
| >120 [3048] | ±.50 [12.70] |

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

| | | | |
|---|-----------|--|----------|
| | | INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 | |
| | | SCALE | SHEET |
| Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920 | | NONE | 1 OF 1 |
| DESCRIPTION SMA MALE TO SMA FEMALE BULKHEAD CABLE USING PE-SR405FL COAX | | | |
| SIZE | CAGE CODE | DRAWN BY | ITEM NO. |
| A | 53919 | AKRESOWSKI | PE3C3944 |
| REV | | | A |