

## Fire Rated SMA Male to Reverse Polarity SMA Plug Low Loss Cable 48 Inch Length Using LMR-195-FR Coax with HeatShrink

### PE3W09800/HS-48

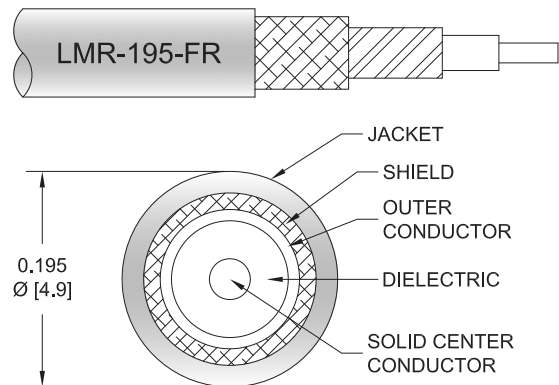


#### Configuration

- Connector 1: SMA Male
- Connector 2: SMA Plug Reverse Polarity
- Cable Type: LMR-195-FR
- Coax Flex Type: Flexible

#### Features

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 76% Phase Velocity
- Double Shielded
- FRPE Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3W09800/HS-48 SMA male to reverse polarity SMA plug 48 inch cable using LMR-195-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 SMA to reverse polarity SMA cable assembly has a male to plug gender configuration with 50 ohm flexible LMR-195-FR coax. The PE3W09800/HS-48 SMA male to reverse polarity SMA plug cable assembly operates to 5.8 GHz. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 90 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      |              | 5.8     | GHz                   |
| Velocity of Propagation       |         | 76           |         | %                     |
| RF Shielding                  | 90      |              |         | dB                    |
| Group Delay                   |         | 1.27 [4.17]  |         | ns/ft [ns/m]          |
| Capacitance                   |         | 25.4 [83.33] |         | pF/ft [pF/m]          |
| Inductance                    |         | 0.064 [0.21] |         | uH/ft [uH/m]          |
| DC Resistance Inner Conductor |         | 7.6 [24.93]  |         | Ohms/1000ft [Ohms/Km] |
| DC Resistance Outer Conductor |         | 4.9 [16.08]  |         | Ohms/1000ft [Ohms/Km] |

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**Electrical Specifications**

| Description  | Minimum | Typical | Maximum | Units |
|--------------|---------|---------|---------|-------|
| Jacket Spark |         |         | 3,000   | Vrms  |

**Specifications by Frequency**

| Description           | F1   | F2   | F3   | F4   | F5  | Units |
|-----------------------|------|------|------|------|-----|-------|
| Frequency             | 0.25 | 0.5  | 1    | 2.5  | 5.8 | GHz   |
| Insertion Loss (Typ.) | 0.43 | 0.53 | 0.67 | 0.96 | 1.4 | dB    |

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1 dB per connector.

**Mechanical Specifications**

**Cable Assembly**

|                |                      |
|----------------|----------------------|
| Length         | 48 in [121.92 cm]    |
| Width/Diameter | 0.5 in [12.7 mm]     |
| Weight         | 0.305 lbs [138.35 g] |

**Cable**

|                                      |                        |
|--------------------------------------|------------------------|
| Cable Type                           | LMR-195-FR             |
| Impedance                            | 50 Ohms                |
| Inner Conductor Type                 | Solid                  |
| Inner Conductor Material and Plating | Copper                 |
| Dielectric Type                      | PE                     |
| Number of Shields                    | 2                      |
| Shield Layer 1                       | Aluminum Tape          |
| Shield Layer 2                       | Tinned Copper Braid    |
| Jacket Material                      | FRPE, Black            |
| Jacket Diameter                      | 0.195 in [4.95 mm]     |
| One Time Minimum Bend Radius         | 0.5 in [12.7 mm]       |
| Repeated Minimum Bend Radius         | 2 in [50.8 mm]         |
| Bending Moment                       | 0.2 lbs-ft [0.27 N-m]  |
| Flat Plate Crush                     | 15 lbs/in [0.27 Kg/mm] |
| Tensile Strength                     | 40 lbs [18.14 Kg]      |

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#### Connectors

| Description                        | Connector 1      | Connector 2               |
|------------------------------------|------------------|---------------------------|
| Type                               | SMA Male         | SMA Plug Reverse Polarity |
| Specification                      | MIL-STD-348A     |                           |
| Impedance                          | 50 Ohms          | 50 Ohms                   |
| Configuration                      | Straight         | Straight                  |
| Contact Material and Plating       | Brass, Gold      | Beryllium Copper, Gold    |
| Contact Plating Specification      | 50 µin minimum   | QQ-C-530                  |
| Dielectric Type                    | PTFE             | Teflon                    |
| Body Material and Plating          | Brass, Nickel    | Brass, Nickel             |
| Body Plating Specification         | 100 µin minimum  | QQ-B-626                  |
| Coupling Nut Material and Plating  | Brass, Nickel    | Brass, Nickel             |
| Coupling Nut Plating Specification | 100 µin minimum  | QQ-B-626                  |
| Hex Size                           | 5/16 inch        |                           |
| Torque                             | 3 in-lbs 0.34 Nm |                           |

#### 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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## PE3W09800/HS-48

### Typical Performance Data

### How to Order

Part Number Configuration:

**PE3W09800/HS**

**- xx**

**uu**

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3W09800/HS-12 = 12 inches long cable  
PE3W09800/HS-100cm = 100 cm long cable

Fire Rated SMA Male to Reverse Polarity SMA Plug Low Loss Cable 48 Inch Length Using LMR-195-FR Coax with HeatShrink 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 SMA Male to Reverse Polarity SMA Plug Low Loss Cable 48 Inch Length Using LMR-195-FR Coax with HeatShrink PE3W09800/HS-48](https://www.pasternack.com/fire-rated-sma-male-to-reverse-polarity-sma-plug-low-loss-cable-48-inch-length-using-lmr-195-fr-with-heatshrink-pe3w09800-hs-48)

URL: <https://www.pasternack.com/fire-rated-sma-male-to-reverse-polarity-sma-plug-low-loss-cable-48-inch-length-using-lmr-195-fr-with-heatshrink-pe3w09800-hs-48-p.aspx>

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PE3W09800/HS-48 CAD Drawing

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