



Reverse Polarity SMA Male to Reverse Polarity SMA  
Female Low Loss Cable Using LMR-240-UF Coax

**TECHNICAL DATA SHEET**

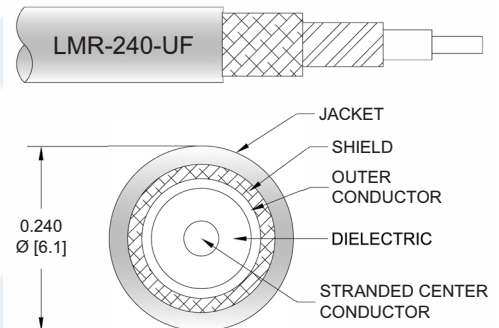
**PE3W02839**

**Configuration**

- Connector 1: SMA Male Reverse Polarity
- Connector 2: SMA Female Reverse Polarity
- Cable Type: LMR-240-UF
- Coax Flex Type: Flexible

**Features**

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- TPE Jacket



**Applications**

- General Purpose
- Laboratory Use

**Description**

Pasternack's PE3W02839 reverse polarity SMA male to reverse polarity SMA female cable using LMR-240-UF 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 reverse polarity SMA to reverse polarity SMA cable assembly has a male to female gender configuration with 50 ohm flexible LMR-240-UF coax. The PE3W02839 reverse polarity SMA male to reverse polarity SMA female cable assembly operates to 6 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Reverse Polarity SMA Male to Reverse Polarity SMA Female Low Loss Cable Using LMR-240-UF Coax PE3W02839](#)



## Reverse Polarity SMA Male to Reverse Polarity SMA Female Low Loss Cable Using LMR-240-UF Coax

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**PE3W02839**

#### Electrical Specifications

| Description                   | Minimum | Typical      | Maximum | Units                            |
|-------------------------------|---------|--------------|---------|----------------------------------|
| Frequency Range               | DC      |              | 6       | GHz                              |
| VSWR                          |         |              | 1.4:1   |                                  |
| Velocity of Propagation       |         | 84           |         | %                                |
| RF Shielding                  | 90      |              |         | dB                               |
| Group Delay                   |         | 1.21 [3.97]  |         | ns/ft [ns/m]                     |
| Capacitance                   |         | 24.2 [79.4]  |         | pF/ft [pF/m]                     |
| Inductance                    |         | 0.06 [0.2]   |         | uH/ft [uH/m]                     |
| DC Resistance Inner Conductor |         | 4.28 [14.04] |         | $\Omega$ /1000ft [ $\Omega$ /Km] |
| DC Resistance Outer Conductor |         | 3.89 [12.76] |         | $\Omega$ /1000ft [ $\Omega$ /Km] |
| Jacket Spark                  |         |              | 5,000   | Vrms                             |

#### Specifications by Frequency

| Part Number   | Length                   | Description           | F1   | F2   | F3   | F4   | F5   | Units | Weight (lbs) |
|---------------|--------------------------|-----------------------|------|------|------|------|------|-------|--------------|
|               |                          | Frequency             | 250  | 500  | 1000 | 2500 | 6000 | MHz   |              |
| PE3W02839     | Custom Lengths Available | Insertion Loss (Typ.) | 0.05 | 0.07 | 0.1  | 0.16 | 0.24 | dB/ft |              |
|               |                          |                       | 0.16 | 0.22 | 0.32 | 0.51 | 0.81 | dB/m  |              |
| PE3W02839-12  | 12 inch                  | Insertion Loss (Typ.) | 0.25 | 0.27 | 0.3  | 0.36 | 0.45 | dB    | 0.058        |
| PE3W02839-24  | 24 inch                  | Insertion Loss (Typ.) | 0.3  | 0.34 | 0.4  | 0.51 | 0.69 | dB    | 0.091        |
| PE3W02839-36  | 36 inch                  | Insertion Loss (Typ.) | 0.34 | 0.4  | 0.49 | 0.67 | 0.94 | dB    | 0.123        |
| PE3W02839-60  | 60 inch                  | Insertion Loss (Typ.) | 0.43 | 0.53 | 0.68 | 0.98 | 1.42 | dB    | 0.187        |
| PE3W02839-300 | 300 inch                 | Insertion Loss (Typ.) | 1.35 | 1.85 | 2.6  | 4.08 | 6.3  | dB    | 0.827        |

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:                | 0.058 pounds   |
| Additional Weight per Inch: | 0.00267 pounds |

#### Mechanical Specifications

##### Cable Assembly

Weight 0.058 lbs [26.31 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Reverse Polarity SMA Male to Reverse Polarity SMA Female Low Loss Cable Using LMR-240-UF Coax PE3W02839](#)



## Reverse Polarity SMA Male to Reverse Polarity SMA Female Low Loss Cable Using LMR-240-UF Coax

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#### Cable

|                                      |                        |
|--------------------------------------|------------------------|
| Cable Type                           | LMR-240-UF             |
| Impedance                            | 50 Ohms                |
| Inner Conductor Type                 | Stranded               |
| Inner Conductor Material and Plating | Copper                 |
| Dielectric Type                      | PE (F)                 |
| Number of Shields                    | 2                      |
| Shield Layer 1                       | Aluminum Tape          |
| Shield Layer 2                       | Tinned Copper Braid    |
| Jacket Material                      | TPE, Black             |
| Jacket Diameter                      | 0.24 in [6.1 mm]       |
| One Time Minimum Bend Radius         | 0.75 in [19.05 mm]     |
| Repeated Minimum Bend Radius         | 2.5 in [63.5 mm]       |
| Bending Moment                       | 0.13 lbs-ft [0.18 N-m] |
| Flat Plate Crush                     | 13 lbs/in [0.23 Kg/mm] |
| Tensile Strength                     | 80 lbs [36.29 Kg]      |

#### Connectors

| Description                       | Connector 1                        | Connector 2                          |
|-----------------------------------|------------------------------------|--------------------------------------|
| Type                              | SMA Male Reverse Polarity Threaded | SMA Female Reverse Polarity Threaded |
| Impedance                         | 50 Ohms                            | 50 Ohms                              |
| Contact Material and Plating      | Beryllium Copper, Gold             | Beryllium Copper, Gold               |
| Dielectric Type                   | PTFE                               | PTFE                                 |
| Body Material and Plating         | Brass, Gold                        | Brass, Gold                          |
| Coupling Nut Material and Plating | Brass, Gold                        |                                      |
| Hex Size                          | 5/16 inch                          |                                      |
| Torque                            | 3 in-lbs [0.34 Nm]                 |                                      |

#### Environmental Specifications

##### Temperature

Operating Range -40 to +85 deg C

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

#### Plotted and Other Data

Notes:

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## Reverse Polarity SMA Male to Reverse Polarity SMA Female Low Loss Cable Using LMR-240-UF Coax

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**PE3W02839**

#### How to Order

Part Number Configuration:

**PE3W02839**

- **xx**

**uu**

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

Example: PE3W02839-12 = 12 inches long cable  
PE3W02839-100cm = 100 cm long cable

Reverse Polarity SMA Male to Reverse Polarity SMA Female Low Loss Cable Using LMR-240-UF 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: [Reverse Polarity SMA Male to Reverse Polarity SMA Female Low Loss Cable Using LMR-240-UF Coax PE3W02839](https://www.pasternack.com/reverse-polarity-sma-male-to-reverse-polarity-sma-female-low-loss-cable-using-lmr-240-uf-pe3w02839)

URL: <https://www.pasternack.com/reverse-polarity-sma-male-to-reverse-polarity-sma-female-low-loss-cable-using-lmr-240-uf-pe3w02839-p.aspx>

The information contained in 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 reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

