



## Reverse Polarity SMA Plug to Reverse Polarity SMA Jack Low Loss Cable Using LMR-400 Coax

### RF Cable Assemblies Technical Data Sheet

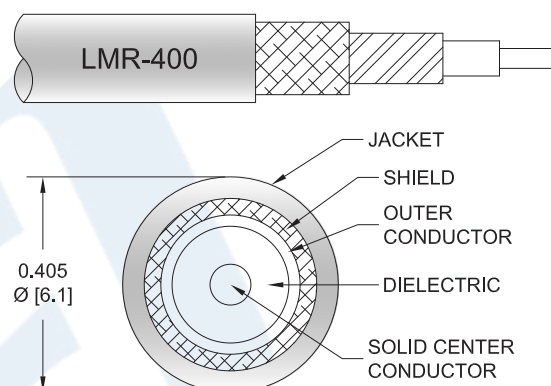
**PE3W09391**

#### Configuration

- Connector 1: SMA Plug Reverse Polarity
- Connector 2: SMA Jack Reverse Polarity
- Cable Type: LMR-400

#### Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- Double Shielded
- PE Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3W09391 reverse polarity SMA plug to reverse polarity SMA jack cable using LMR-400 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 plug to jack gender configuration with 50 ohm flexible LMR-400 coax. The PE3W09391 reverse polarity SMA plug to reverse polarity SMA jack 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 Plug to Reverse Polarity SMA Jack Low Loss Cable Using LMR-400 Coax PE3W09391](#)



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#### Electrical Specifications

| Description                   | Minimum | Typical      | Maximum | Units           |
|-------------------------------|---------|--------------|---------|-----------------|
| Frequency Range               | DC      |              | 6       | GHz             |
| VSWR                          |         |              | 1.4:1   |                 |
| Velocity of Propagation       |         | 85           |         | %               |
| RF Shielding                  | 90      |              |         | dB              |
| Group Delay                   |         | 1.2 [3.94]   |         | ns/ft [ns/m]    |
| Capacitance                   |         | 23.9 [78.41] |         | pF/ft [pF/m]    |
| Inductance                    |         | 0.06 [0.2]   |         | uH/ft [uH/m]    |
| DC Resistance Inner Conductor |         | 1.39 [4.56]  |         | Ω/1000ft [Ω/Km] |
| DC Resistance Outer Conductor |         | 1.65 [5.41]  |         | Ω/1000ft [Ω/Km] |
| Jacket Spark                  |         |              | 8,000   | Vrms            |

#### Specifications by Frequency

| Description           | F1   | F2    | F3    | F4    | F5    | Units |
|-----------------------|------|-------|-------|-------|-------|-------|
| Frequency             | 0.25 | 0.5   | 1     | 2.5   | 6     | GHz   |
| Insertion Loss (Typ.) | 0.02 | 0.028 | 0.041 | 0.068 | 0.108 | dB/ft |
|                       | 0.07 | 0.09  | 0.13  | 0.22  | 0.35  | dB/m  |

#### Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

#### Mechanical Specifications

##### Cable Assembly

Weight 0.176 lbs [79.83 g]

##### Cable

Cable Type LMR-400  
Impedance 50 Ohms  
Inner Conductor Type Solid  
Inner Conductor Material and Plating Copper Clad Aluminum  
Dielectric Type PE (F)  
Number of Shields 2  
Shield Layer 1 Aluminum Tape  
Shield Layer 2 Tinned Copper Braid  
Jacket Material PE, Black  
Jacket Diameter 0.405 in [10.29 mm]

One Time Minimum Bend Radius 1 in [25.4 mm]

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 Plug to Reverse Polarity SMA Jack Low Loss Cable Using LMR-400 Coax PE3W09391](#)



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|                              |                        |
|------------------------------|------------------------|
| Repeated Minimum Bend Radius | 4 in [101.6 mm]        |
| Bending Moment               | 0.5 lbs-ft [0.68 N-m]  |
| Flat Plate Crush             | 40 lbs/in [0.71 Kg/mm] |
| Tensile Strength             | 160 lbs [72.57 Kg]     |

#### Connectors

| Description                          | Connector 1               | Connector 2               |
|--------------------------------------|---------------------------|---------------------------|
| Type                                 | SMA Plug Reverse Polarity | SMA Jack Reverse Polarity |
| Impedance                            | 50 Ohms                   | 50 Ohms                   |
| Mating Cycles                        |                           | 500                       |
| Contact Material and Plating         | Beryllium Copper, Gold    | Brass, Gold               |
| Dielectric Type                      | PTFE                      | PTFE                      |
| Outer Conductor Material and Plating |                           | Brass, Nickel             |
| Body Material and Plating            | Brass, Gold               | Brass, Nickel             |
| 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:

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 Plug to Reverse Polarity SMA Jack Low Loss Cable Using LMR-400 Coax PE3W09391](#)



## Reverse Polarity SMA Plug to Reverse Polarity SMA Jack Low Loss Cable Using LMR-400 Coax

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**PE3W09391**

#### How to Order

Part Number Configuration:

**PE3W09391**

- **xx**

**uu**

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

Example: PE3W09391-12 = 12 inches long cable  
PE3W09391-100cm = 100 cm long cable

Reverse Polarity SMA Plug to Reverse Polarity SMA Jack Low Loss Cable Using LMR-400 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.

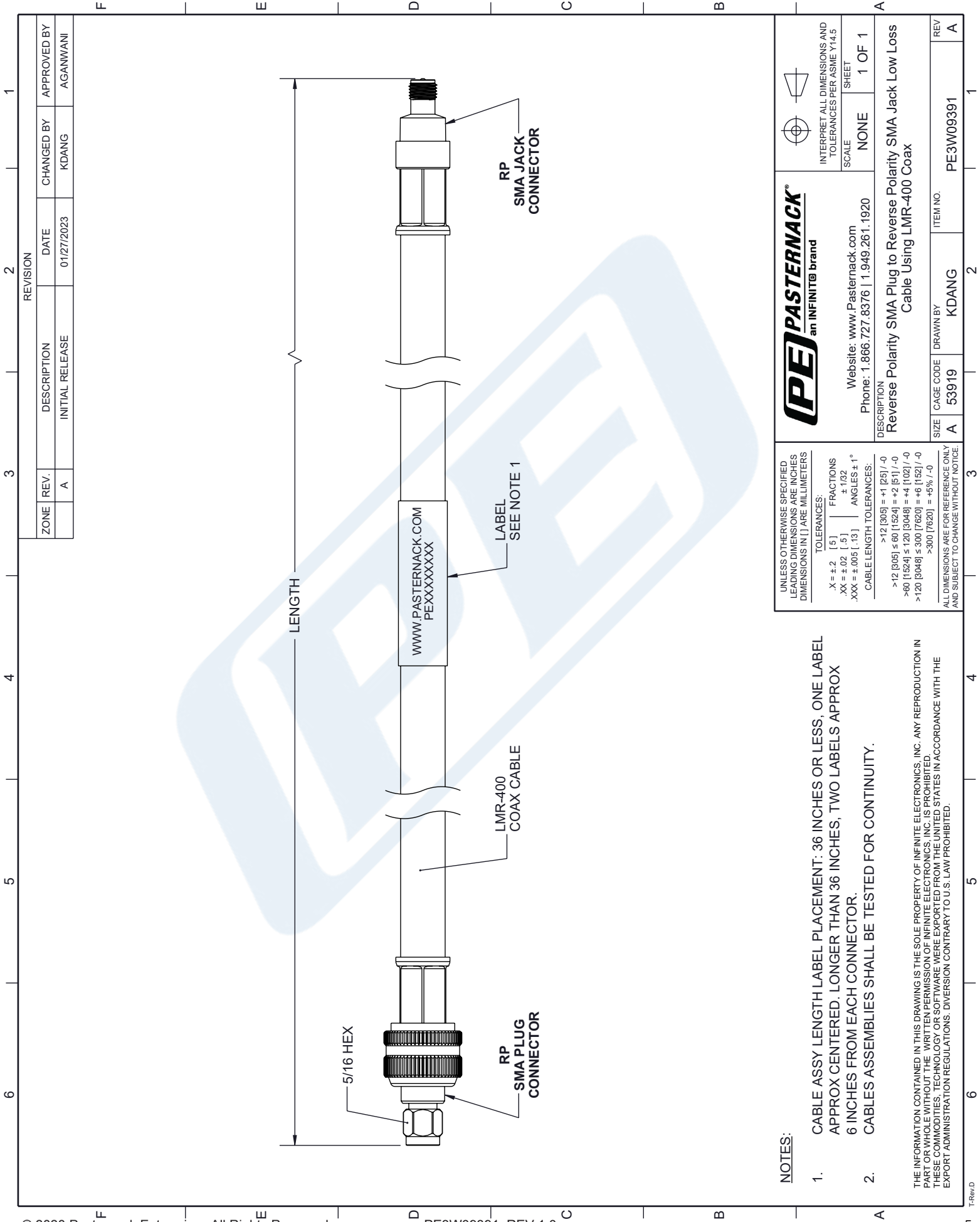
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Reverse Polarity SMA Plug to Reverse Polarity SMA Jack Low Loss Cable Using LMR-400 Coax PE3W09391](https://www.pasternack.com/reverse-polarity-sma-plug-to-reverse-polarity-sma-jack-low-loss-cable-using-lmr-400-pe3w09391-p.aspx)

URL: <https://www.pasternack.com/reverse-polarity-sma-plug-to-reverse-polarity-sma-jack-low-loss-cable-using-lmr-400-pe3w09391-p.aspx>

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PE3W09391 CAD Drawing

Reverse Polarity SMA Plug to Reverse Polarity SMA  
Jack Low Loss Cable Using LMR-400 Coax



NOTES:

- CABLE ASSY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROX CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROX 6 INCHES FROM EACH CONNECTOR.
- CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

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| Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a><br>Phone: 1.866.727.8376   1.949.261.1920                 |           | SCALE                                                                                                                                         | SHEET     |
| DESCRIPTION<br>Reverse Polarity SMA Plug to Reverse Polarity SMA Jack Low Loss Cable Using LMR-400 Coax                       |           | NONE                                                                                                                                          | 1 OF 1    |
| SIZE                                                                                                                          | CAGE CODE | DRAWN BY                                                                                                                                      | ITEM NO.  |
| A                                                                                                                             | 53919     | KDANG                                                                                                                                         | PE3W09391 |
| REV                                                                                                                           |           |                                                                                                                                               | A         |