



## SMA Male Right Angle to SMA Female Low Loss Cable Using LMR-195 Coax with HeatShrink, LF Solder

### RF Cable Assemblies Technical Data Sheet

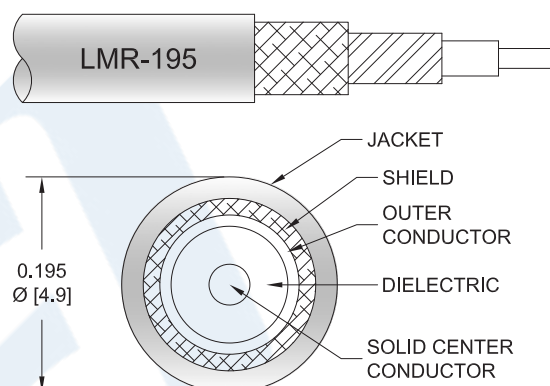
**PE3C1590LF/HS**

#### Configuration

- Connector 1: SMA Male Right Angle
- Connector 2: SMA Female
- Cable Type: LMR-195

#### Features

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 80% Phase Velocity
- Double Shielded
- PE Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3C1590LF/HS SMA male right angle to SMA female cable using LMR-195 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 SMA cable assembly has a male to female gender configuration with 50 ohm flexible LMR-195 coax. The PE3C1590LF/HS SMA male to SMA female cable assembly operates to 5.8 GHz. The right angle SMA interface on the LMR-195 cable allows for easier connections in tight spaces. 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: [SMA Male Right Angle to SMA Female Low Loss Cable Using LMR-195 Coax with Heat-Shrink, LF Solder PE3C1590LF/HS](#)



## SMA Male Right Angle to SMA Female Low Loss Cable Using LMR-195 Coax with HeatShrink, LF Solder

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**PE3C1590LF/HS**

#### Electrical Specifications

| Description                   | Minimum | Typical      | Maximum | Units           |
|-------------------------------|---------|--------------|---------|-----------------|
| Frequency Range               | DC      |              | 5.8     | GHz             |
| VSWR                          |         |              | 1.4:1   |                 |
| Velocity of Propagation       |         | 80           |         | %               |
| 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]  |         | Ω/1000ft [Ω/Km] |
| DC Resistance Outer Conductor |         | 4.9 [16.08]  |         | Ω/1000ft [Ω/Km] |
| 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.) | 0.057 | 0.081 | 0.116 | 0.19 | 0.299 | dB/ft |
|                       | 0.19  | 0.27  | 0.38  | 0.62 | 0.98  | dB/m  |

#### Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB for the straight connector and 0.2 dB for the right angle connector.

#### Mechanical Specifications

##### Cable Assembly

Weight 0.048 lbs [21.77 g]

##### Cable

|                                      |                     |
|--------------------------------------|---------------------|
| Cable Type                           | LMR-195             |
| Impedance                            | 50 Ohms             |
| Inner Conductor Type                 | Solid               |
| 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                      | PE, Black           |
| Jacket Diameter                      | 0.195 in [4.95 mm]  |

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### RF Cable Assemblies Technical Data Sheet

**PE3C1590LF/HS**

|                              |                        |
|------------------------------|------------------------|
| 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]      |

#### Connectors

| Description                        | Connector 1          | Connector 2            |
|------------------------------------|----------------------|------------------------|
| Type                               | SMA Male Right Angle | SMA Female             |
| Specification                      | MIL-STD-348A         |                        |
| Impedance                          | 50 Ohms              | 50 Ohms                |
| Contact Material and Plating       | Brass, Gold          | Beryllium Copper, Gold |
| Contact Plating Specification      | 50 µin minimum       | 50µ in. minimum        |
| Dielectric Type                    | PTFE                 | PTFE                   |
| Body Material and Plating          | Brass, Nickel        | Brass, Nickel          |
| Body Plating Specification         | 100 µin minimum      | 100µ in. minimum       |
| Coupling Nut Material and Plating  | Brass, Nickel        |                        |
| Coupling Nut Plating Specification | 100 µin minimum      |                        |
| 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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## SMA Male Right Angle to SMA Female Low Loss Cable Using LMR-195 Coax with HeatShrink, LF Solder

### RF Cable Assemblies Technical Data Sheet

**PE3C1590LF/HS**

#### How to Order

Part Number Configuration:

**PE3C1590LF/HS - xx**

**uu**

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

Example: PE3C1590LF/HS-12 = 12 inches long cable  
PE3C1590LF/HS-100cm = 100 cm long cable

SMA Male Right Angle to SMA Female Low Loss Cable Using LMR-195 Coax with HeatShrink, LF Solder 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 Right Angle to SMA Female Low Loss Cable Using LMR-195 Coax with HeatShrink, LF Solder PE3C1590LF/HS](#)

URL: <https://www.pasternack.com/sma-male-right-angle-to-sma-female-low-loss-cable-using-lmr-195-with-heatshrink-lf-solder-pe3c1590lf-hs-p.aspx>

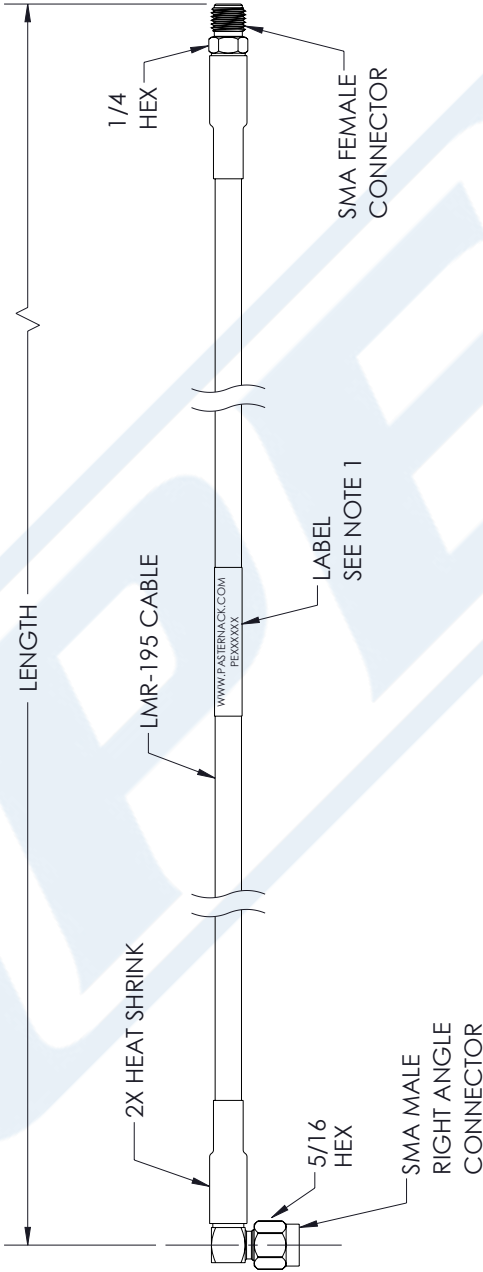
The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such 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.

PE3C1590LF/HS CAD Drawing

SMA Male Right Angle to SMA Female Low Loss Cable  
Using LMR-195 Coax with HeatShrink, LF Solder

1 2 3 4 5 6

| REVISION |      |                 |             |
|----------|------|-----------------|-------------|
| ZONE     | REV. | DESCRIPTION     | DATE        |
|          | A    | INITIAL RELEASE | 01/25/2023  |
|          |      |                 | APPROVED BY |
|          |      |                 | AGANWANI    |



NOTES:

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

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| <br>an INFINITO brand      |           | <br>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 |               |
| Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a><br>Phone: 1.866.727.8376   1.949.261.1920 |           | SCALE                                                                                                                                         | SHEET         |
| DESCRIPTION                                                                                                   |           | NONE                                                                                                                                          | 1 OF 1        |
| SMA Male Right Angle to SMA Female Low Loss Cable Using LMR-195 Coax with HeatShrink, LF Solder               |           |                                                                                                                                               |               |
| SIZE                                                                                                          | CAGE CODE | DRAWN BY                                                                                                                                      | ITEM NO.      |
| A                                                                                                             | 53919     | BPUCHASKI                                                                                                                                     | PE3C1590LF/HS |
|                                                                                                               |           | REV                                                                                                                                           | A             |