

Blue FAKRA Plug to SMA Female Cable Using  
PE-C100-LSZH Coax In 150 CM Length



**RF Cable Assemblies Technical Data Sheet**

**PE3C5987-150CM**

**Configuration**

- Connector 1: FAKRA Plug
- Connector 2: SMA Female
- Cable Type: PE-C100-LSZH

**Features**

- Max Frequency 4 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- LSZH Jacket

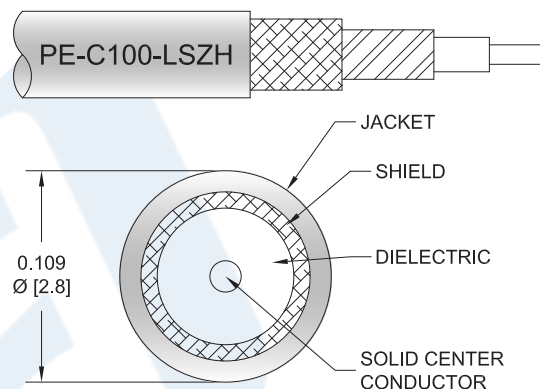
**Applications**

- General Purpose
- Laboratory Use

**Description**

Pasternack's PE3C5987-150CM blue FAKRA plug to SMA female 150 cm cable using PE-C100-LSZH 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 FAKRA to SMA cable assembly has a plug to female gender configuration with 50 ohm flexible PE-C100-LSZH coax. The PE3C5987-150CM FAKRA plug to SMA female cable assembly operates to 4 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: [Blue FAKRA Plug to SMA Female Cable Using PE-C100-LSZH Coax In 150 CM Length PE3C5987-150CM](#)



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#### Electrical Specifications

| Description                   | Minimum | Typical       | Maximum | Units           |
|-------------------------------|---------|---------------|---------|-----------------|
| Frequency Range               | DC      |               | 4       | GHz             |
| VSWR                          |         |               | 1.4:1   |                 |
| Velocity of Propagation       |         | 66            |         | %               |
| RF Shielding                  | 90      |               |         | dB              |
| Group Delay                   |         | 1.62 [5.31]   |         | ns/ft [ns/m]    |
| Capacitance                   |         | 30.8 [101.05] |         | pF/ft [pF/m]    |
| Inductance                    |         | 0.077 [0.25]  |         | uH/ft [uH/m]    |
| DC Resistance Inner Conductor |         | 81 [265.75]   |         | Ω/1000ft [Ω/Km] |
| DC Resistance Outer Conductor |         | 9.5 [31.17]   |         | Ω/1000ft [Ω/Km] |
| Jacket Spark                  |         |               | 2,000   | Vrms            |

#### Specifications by Frequency

| Description           | F1   | F2   | F3   | F4   | F5   | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency             | 0.1  | 0.25 | 0.5  | 1    | 4    | GHz   |
| Insertion Loss (Typ.) | 0.41 | 0.67 | 0.96 | 1.39 | 2.97 | 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\*SQRT(FGHz) dB per connector.

#### Mechanical Specifications

##### Cable Assembly

Length\* 59.06 in [150.01 cm]

Weight 0.062 lbs [28.12 g]

##### Cable

Cable Type PE-C100-LSZH  
 Impedance 50 Ohms  
 Inner Conductor Type Solid  
 Inner Conductor Material and Plating Copper Clad Steel  
 Dielectric Type PE  
 Number of Shields 2  
 Shield Layer 1 Aluminum Tape  
 Shield Layer 2 Tinned Copper Braid  
 Jacket Material LSZH, Black  
 Jacket Diameter 0.109 in [2.77 mm]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Blue FAKRA Plug to SMA Female Cable Using PE-C100-LSZH Coax In 150 CM Length PE3C5987-150CM](#)



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**PE3C5987-150CM**

|                              |                        |
|------------------------------|------------------------|
| One Time Minimum Bend Radius | 0.25 in [6.35 mm]      |
| Repeated Minimum Bend Radius | 1 in [25.4 mm]         |
| Bending Moment               | 0.1 lbs-ft [0.14 N-m]  |
| Flat Plate Crush             | 10 lbs/in [0.18 Kg/mm] |
| Tensile Strength             | 15 lbs [6.8 Kg]        |

#### Connectors

| Description                          | Connector 1           | Connector 2            |
|--------------------------------------|-----------------------|------------------------|
| Type                                 | FAKRA Plug            | SMA Female             |
| Specification                        |                       | MIL-STD-348            |
| Impedance                            | 50 Ohms               | 50 Ohms                |
| Configuration                        | Straight              | Straight               |
| Mating Cycles                        |                       | 100                    |
| Contact Material and Plating         | Phosphor Bronze, Gold | Beryllium Copper, Gold |
| Contact Plating Specification        |                       | ASTM-B488              |
| Dielectric Type                      | PTFE                  | PTFE                   |
| Outer Conductor Material and Plating | Brass, Nickel         |                        |
| Body Material and Plating            | Plastic               | Brass, Nickel          |
| Body Plating Specification           |                       | ASTM-B689              |

#### 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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## Blue FAKRA Plug to SMA Female Cable Using PE-C100-LSZH Coax In 150 CM Length

### RF Cable Assemblies Technical Data Sheet

**PE3C5987-150CM**

#### How to Order

Part Number Configuration:

**PE3C5987**

- **xx**

**uu**

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

Example: PE3C5987-12 = 12 inches long cable  
PE3C5987-100cm = 100 cm long cable

Blue FAKRA Plug to SMA Female Cable Using PE-C100-LSZH Coax In 150 CM Length 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: [Blue FAKRA Plug to SMA Female Cable Using PE-C100-LSZH Coax In 150 CM Length PE3C5987-150CM](https://www.pasternack.com/plug-to-sma-female-cable-150-cm-leAgth-usiAg-pe-c100-lszh-pe3c5987-150cm-p.aspx)

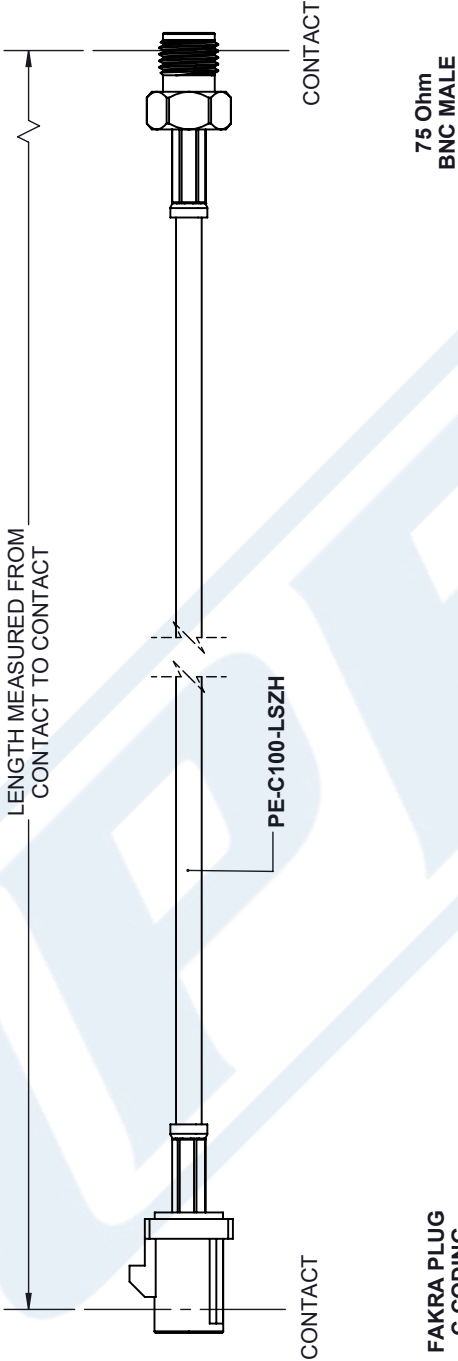
URL: <https://www.pasternack.com/plug-to-sma-female-cable-150-cm-leAgth-usiAg-pe-c100-lszh-pe3c5987-150cm-p.aspx>

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PE3C5987-150CM CAD Drawing

Blue FAKRA Plug to SMA Female Cable Using PE-C100-LSZH Coax In 150 CM Length

| REVISIONS |                 |           |            |
|-----------|-----------------|-----------|------------|
| REV.      | DESCRIPTION     | DATE      | APPROVED   |
| A         | INITIAL RELEASE | 11/8/2021 | A. GANWANI |



|                                                                                                  |  |                                                                                                                                                                                                  |  |                                                                                                                       |  |                                                                                                                                                                                                                                  |  |                                                 |  |                      |  |
|--------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------|--|----------------------|--|
| UNLESS OTHERWISE SPECIFIED<br>LEADING DIMENSIONS ARE INCHES<br>DIMENSIONS IN [ ] ARE MILLIMETERS |  | TOLERANCES:                                                                                                                                                                                      |  | X = ± .2 [ .008 ] FRACTIONS<br>.XX = ± .02 [ .51 ] ± 1/32<br>.XXX = ± .005 [ .13 ] ANGLES ± 1°                        |  | CABLE LENGTH (L) TOLERANCES:<br>L ≤ 12 [305] = +1 [25] / -0<br>12 [305] < L ≤ 60 [1524] = +2 [51] / -0<br>60 [1524] < L ≤ 120 [3048] = +4 [102] / -0<br>120 [3048] < L ≤ 300 [7620] = +6 [152] / -0<br>300 [7620] < L = +5% / -0 |  | ALL DIMENSIONS SHOWN<br>ARE FOR REFERENCE ONLY. |  |                      |  |
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