

## SMB Plug Right Angle to BNC Male Cable Using RG316-DS Coax, LF Solder

### PE3C3509

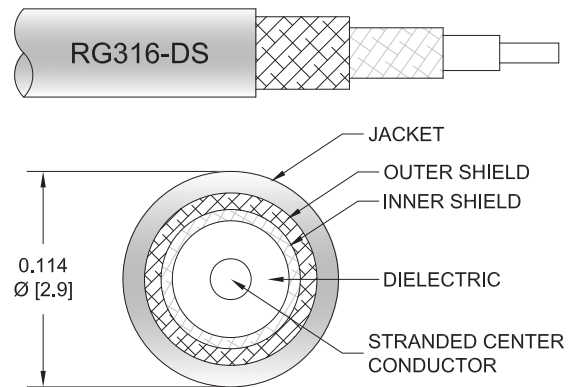


#### Configuration

- Connector 1: SMB Plug Right Angle
- Connector 2: BNC Male
- Cable Type: RG316-DS
- Coax Flex Type: Flexible

#### Features

- Max Frequency 3 GHz
- 70% Phase Velocity
- Double Shielded
- FEP Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3C3509 SMB plug right angle to BNC male cable using RG316-DS 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 SMB to BNC cable assembly has a plug to male gender configuration with 50 ohm flexible RG316-DS coax. The PE3C3509 SMB plug to BNC male cable assembly operates to 3 GHz. The right angle SMB interface on the RG316-DS cable allows for easier connections in tight spaces. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness.

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      |              | 3       | GHz          |
| VSWR                    |         | 1.4:1        |         |              |
| Velocity of Propagation |         | 70           |         | %            |
| Capacitance             |         | 29.4 [96.46] |         | pF/ft [pF/m] |
| Operating Voltage (AC)  |         |              | 250     | Vrms         |

#### Specifications by Frequency

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| Part Number | Length                   | Description           | F1   | F2   | F3    | F4   | F5    | Units | Weight (lbs) |
|-------------|--------------------------|-----------------------|------|------|-------|------|-------|-------|--------------|
|             |                          | Frequency             | 100  | 250  | 500   | 1000 | 3000  | MHz   |              |
| PE3C3509    | Custom Lengths Available | Insertion Loss (Typ.) | 0.08 | 0.13 | 0.194 | 0.29 | 0.535 | dB/ft |              |
|             |                          |                       | 0.27 | 0.42 | 0.64  | 0.96 | 1.76  | dB/m  |              |
| PE3C3509-6  | 6 inch                   | Insertion Loss (Typ.) | 0.35 | 0.37 | 0.4   | 0.45 | 0.57  | dB    | 0.048        |
| PE3C3509-12 | 12 inch                  | Insertion Loss (Typ.) | 0.39 | 0.43 | 0.5   | 0.59 | 0.84  | dB    | 0.055        |
| PE3C3509-24 | 24 inch                  | Insertion Loss (Typ.) | 0.47 | 0.56 | 0.69  | 0.88 | 1.37  | dB    | 0.07         |
| PE3C3509-36 | 36 inch                  | Insertion Loss (Typ.) | 0.55 | 0.69 | 0.89  | 1.17 | 1.91  | dB    | 0.084        |
| PE3C3509-48 | 48 inch                  | Insertion Loss (Typ.) | 0.63 | 0.82 | 1.08  | 1.46 | 2.44  | dB    | 0.098        |

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:    | 0.2 dB         |
| Loss due to Connector 2:    | 0.1 dB         |
| Base Weight:                | 0.055 pounds   |
| Additional Weight per Inch: | 0.00117 pounds |

## Mechanical Specifications

### Cable Assembly

|        |                     |
|--------|---------------------|
| Weight | 0.055 lbs [24.95 g] |
|--------|---------------------|

### Cable

|                                      |                            |
|--------------------------------------|----------------------------|
| Cable Type                           | RG316-DS                   |
| Impedance                            | 50 Ohms                    |
| Inner Conductor Type                 | Stranded                   |
| Inner Conductor Material and Plating | Copper Clad Steel, Silver  |
| Dielectric Type                      | PTFE                       |
| Number of Shields                    | 2                          |
| Shield Layer 1                       | Silver Plated Copper Braid |
| Shield Layer 2                       | Silver Plated Copper Braid |
| Jacket Material                      | FEP, Tan                   |
| Jacket Diameter                      | 0.114 in [2.9 mm]          |
| One Time Minimum Bend Radius         | 0.59 in [14.99 mm]         |

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#### Connectors

| Description                        | Connector 1            | Connector 2     |
|------------------------------------|------------------------|-----------------|
| Type                               | SMB Plug Right Angle   | BNC Male        |
| Specification                      | MIL-STD-348A           | MIL-STD-348A    |
| Impedance                          | 50 Ohms                | 50 Ohms         |
| Configuration                      | Right Angle            | Straight        |
| Contact Material and Plating       | Beryllium Copper, Gold | Brass, Gold     |
| Contact Plating Specification      | 30 µin minimum         | 50 µin minimum  |
| Dielectric Type                    | Teflon                 | Teflon          |
| Body Material and Plating          | Brass, Nickel          | Brass, Nickel   |
| Body Plating Specification         | 100 µin minimum        | 100 µin minimum |
| Coupling Nut Material and Plating  |                        | Brass, Nickel   |
| Coupling Nut Plating Specification |                        | 100 µin minimum |

#### Environmental Specifications

Operating Range Temperature -55 to +165 deg C

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

#### Plotted and Other Data

Notes:

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### PE3C3509

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**PE3C3509**

**- xx**

**uu**

Unit of Measure:  
cm = Centimeters  
<blank> = Inches

Length

Base Number

Example: PE3C3509-12 = 12 inches long cable  
PE3C3509-100cm = 100 cm long cable

SMB Plug Right Angle to BNC Male Cable Using RG316-DS Coax, 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: [SMB Plug Right Angle to BNC Male Cable Using RG316-DS Coax, LF Solder PE3C3509](#)

URL: <https://www.pasternack.com/smb-plug-right-angle-to-bnc-male-cable-using-rg316-ds-lf-solder-pe3c3509-p.aspx>

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PE3C3509 CAD Drawing

SMB Plug Right Angle to BNC Male Cable Using RG316-DS Coax, LF Solder

