

## 75 Ohm Mini SMB Plug Right Angle to 75 Ohm BNC Female Cable Using 75 Ohm RG179 Coax



### PE38809

#### Configuration

- Connector 1: Mini SMB Plug Right Angle
- Connector 2: BNC Female
- Cable Type: RG179
- Coax Flex Type: Flexible

#### Features

- Max Frequency 2 GHz
- FEP Jacket

#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE38809 75 ohm Mini SMB plug right angle to 75 ohm BNC female cable using 75 ohm RG179 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 Mini SMB to BNC cable assembly has a plug to female gender configuration with 75 ohm flexible RG179 coax. The PE38809 Mini SMB plug to BNC female cable assembly operates to 2 GHz. The right angle Mini SMB interface on the RG179 cable allows for easier connections in tight spaces.

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      |            | 2       | GHz          |
| VSWR            |         |            | 1.4:1   |              |
| Capacitance     |         | 23 [75.46] |         | pF/ft [pF/m] |

#### Specifications by Frequency

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| Part Number | Length                   | Description           | F1   | F2   | F3    | F4   | Units | Weight (lbs) |
|-------------|--------------------------|-----------------------|------|------|-------|------|-------|--------------|
|             |                          | Frequency             | 100  | 250  | 500   | 1000 | MHz   |              |
| PE38809     | Custom Lengths Available | Insertion Loss (Typ.) | 0.09 | 0.14 | 0.203 | 0.3  | dB/ft |              |
|             |                          |                       | 0.3  | 0.45 | 0.67  | 0.99 | dB/m  |              |
| PE38809-12  | 12 inch                  | Insertion Loss (Typ.) | 0.39 | 0.44 | 0.51  | 0.6  | dB    | 0.043        |
| PE38809-24  | 24 inch                  | Insertion Loss (Typ.) | 0.48 | 0.58 | 0.71  | 0.9  | dB    | 0.052        |
| PE38809-36  | 36 inch                  | Insertion Loss (Typ.) | 0.57 | 0.72 | 0.91  | 1.2  | dB    | 0.061        |
| PE38809-48  | 48 inch                  | Insertion Loss (Typ.) | 0.66 | 0.85 | 1.12  | 1.5  | dB    | 0.07         |
| PE38809-72  | 72 inch                  | Insertion Loss (Typ.) | 0.84 | 1.13 | 1.52  | 2.1  | dB    | 0.088        |

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:    | 0.2 dB         |
| Base Weight:                | 0.043 pounds   |
| Additional Weight per Inch: | 0.00075 pounds |

### Mechanical Specifications

#### Cable Assembly

|        |                    |
|--------|--------------------|
| Weight | 0.043 lbs [19.5 g] |
|--------|--------------------|

#### Cable

|                                      |                            |
|--------------------------------------|----------------------------|
| Cable Type                           | RG179                      |
| Impedance                            | 75 Ohms                    |
| Inner Conductor Type                 | Stranded                   |
| Inner Conductor Material and Plating | Copper Clad Steel, Silver  |
| Dielectric Type                      | PTFE                       |
| Number of Shields                    | 1                          |
| Shield Layer 1                       | Silver Plated Copper Braid |
| Jacket Material                      | FEP, Tan                   |
| Jacket Diameter                      | 0.1 in [2.54 mm]           |

### Connectors

| Description                   | Connector 1               | Connector 2     |
|-------------------------------|---------------------------|-----------------|
| Type                          | Mini SMB Plug Right Angle | BNC Female      |
| Impedance                     | 75 Ohms                   | 75 Ohms         |
| Configuration                 | Right Angle               | Straight        |
| Contact Material and Plating  | Beryllium Copper, Gold    | Brass, Gold     |
| Contact Plating Specification | 30 µin minimum            | 30 µin minimum  |
| Dielectric Type               | PTFE                      | PTFE            |
| Body Material and Plating     | Brass, Nickel             | Brass, Nickel   |
| Body Plating Specification    | 100 µin minimum           | 100 µin minimum |

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#### Environmental Specifications

Operating Range Temperature -55 to +165 deg C

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

#### Plotted and Other Data

Notes:  
Values at 25°C, sea level.

#### Typical Performance Data

#### How to Order

Part Number Configuration: **PE38809 - xx uu**

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

Example: PE38809-12 = 12 inches long cable  
PE38809-100cm = 100 cm long cable

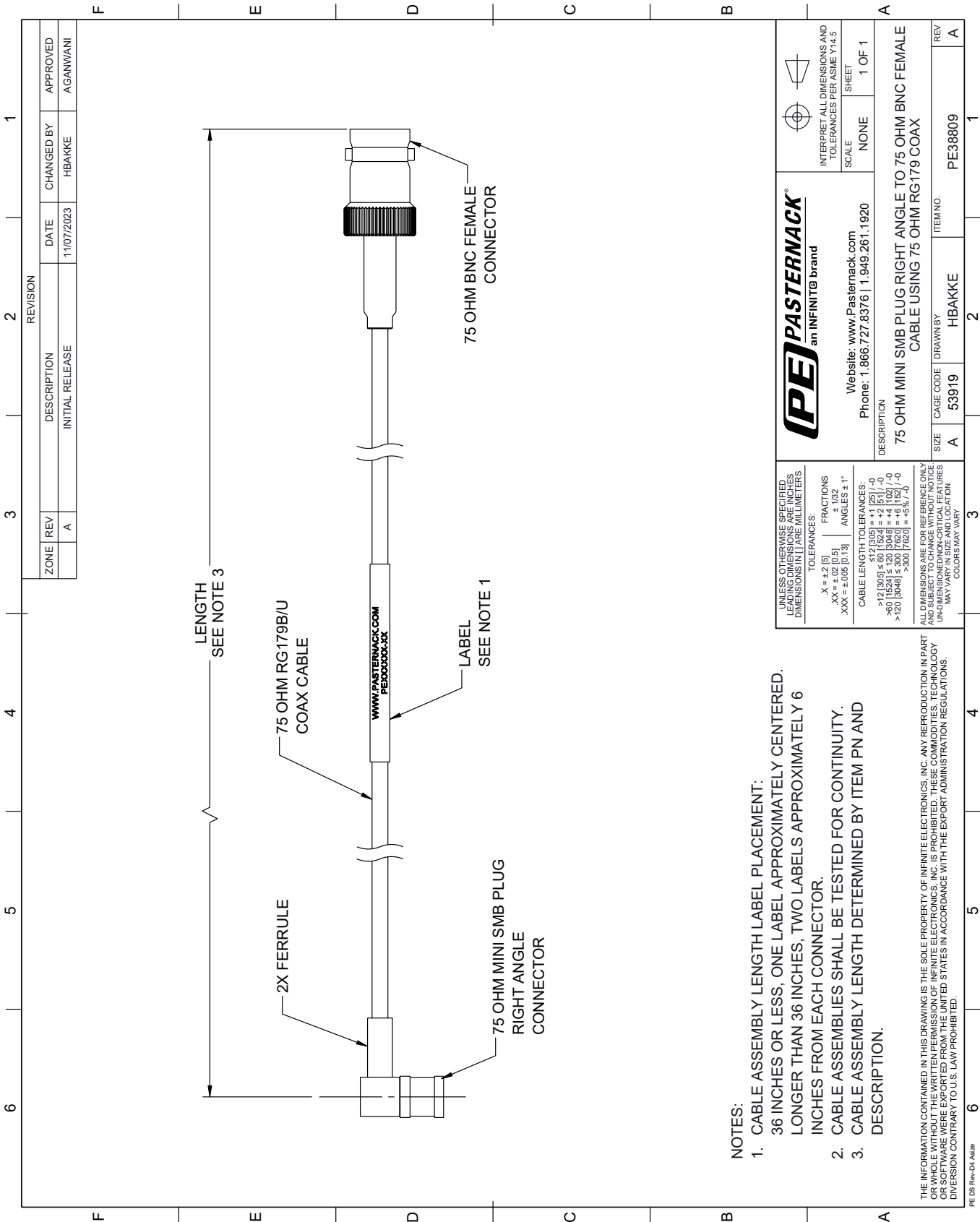
75 Ohm Mini SMB Plug Right Angle to 75 Ohm BNC Female Cable Using 75 Ohm RG179 Coax from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [75 Ohm Mini SMB Plug Right Angle to 75 Ohm BNC Female Cable Using 75 Ohm RG179 Coax PE38809](#)

URL: <https://www.pasternack.com/75-ohm-mini-smb-plug-right-angle-to-75-ohm-bnc-female-cable-using-rg179-pe38809-p.aspx>

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PE38809 CAD Drawing
75 Ohm Mini SMB Plug Right Angle to 75 Ohm BNC Female Cable Using 75 Ohm RG179 Coax



- NOTES:
- 1. 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.
  - 2. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
  - 3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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|----------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|--|--------------------------------------------------------|--|
| UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE MILLIMETERS.                           |  | <b>PE PASTERNAK</b><br>an INFINITE brand                                            |  | INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 |  |
| TOLERANCES:                                                                                                                |  | Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a>                 |  | SCALE                                                  |  |
| .X = +.2 [-.5]                                                                                                             |  | Phone: 1.866.727.8376   1.949.261.1920                                              |  | NONE                                                   |  |
| .XX = +.02 [-.03]                                                                                                          |  | DESCRIPTION                                                                         |  | SHEET                                                  |  |
| .XXX = +.005 [-.013]                                                                                                       |  | 75 OHM MINI SMB PLUG RIGHT ANGLE TO 75 OHM BNC FEMALE CABLE USING 75 OHM RG179 COAX |  | 1 OF 1                                                 |  |
| CABLE LENGTH TOLERANCES:                                                                                                   |  | SIZE                                                                                |  | CAGE CODE                                              |  |
| >12 [305] ≤ 60 [1524] = +.125 [-.0]                                                                                        |  | A                                                                                   |  | 53919                                                  |  |
| >60 [1524] ≤ 120 [3048] = +.102 [-.0]                                                                                      |  | DRAWN BY                                                                            |  | HBAKKE                                                 |  |
| >120 [3048] ≤ 300 [7620] = +.05 [-.0]                                                                                      |  | ITEM NO.                                                                            |  | PE38809                                                |  |
| ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED/NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY. |  | REV                                                                                 |  | A                                                      |  |