



## BNC Male to SMA Female Cable 36 Inch Length Using RG174 Coax

### RF Cable Assemblies Technical Data Sheet

PE3W08823-36

#### Configuration

- Connector 1: BNC Male
- Connector 2: SMA Female
- Cable Type: RG174

#### Features

- Max Frequency 1 GHz
- 66% Phase Velocity
- PVC Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3W08823-36 BNC male to SMA female 36 inch cable using RG174 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 BNC to SMA cable assembly has a male to female gender configuration with 50 ohm flexible RG174 coax. The PE3W08823-36 BNC male to SMA female cable assembly operates to 1 GHz.

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: [BNC Male to SMA Female Cable 36 Inch Length Using RG174 Coax PE3W08823-36](#)



## BNC Male to SMA Female Cable 36 Inch Length Using RG174 Coax

### RF Cable Assemblies Technical Data Sheet

PE3W08823-36

#### Electrical Specifications

| Description             | Minimum | Typical        | Maximum | Units        |
|-------------------------|---------|----------------|---------|--------------|
| Frequency Range         | DC      |                | 1,000   | MHz          |
| Velocity of Propagation |         | 66             |         | %            |
| Capacitance             |         | 31.08 [101.97] |         | pF/ft [pF/m] |

#### Specifications by Frequency

| Description           | F1   | F2   | F3   | F4   | F5    | Units |
|-----------------------|------|------|------|------|-------|-------|
| Frequency             | 50   | 100  | 250  | 500  | 1,000 | MHz   |
| Insertion Loss (Typ.) | 0.33 | 0.45 | 0.61 | 0.83 | 1.15  | dB    |

#### Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax cable and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1 dB per connector.

#### Mechanical Specifications

##### Cable Assembly

|          |                    |
|----------|--------------------|
| Length*  | 36 in [914.4 mm]   |
| Diameter | 0.57 in [14.48 mm] |

##### Cable

|                                      |                     |
|--------------------------------------|---------------------|
| Cable Type                           | RG174               |
| Impedance                            | 50 Ohms             |
| Inner Conductor Type                 | Stranded            |
| Inner Conductor Material and Plating | Copper Clad Steel   |
| Dielectric Type                      | PE                  |
| Number of Shields                    | 1                   |
| Shield Layer 1                       | Tinned Copper Braid |
| Jacket Material                      | PVC, Black          |
| Jacket Diameter                      | 0.11 in [2.79 mm]   |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [BNC Male to SMA Female Cable 36 Inch Length Using RG174 Coax PE3W08823-36](#)



BNC Male to SMA Female Cable 36 Inch  
Length Using RG174 Coax

RF Cable Assemblies Technical Data Sheet

PE3W08823-36

**Connectors**

| Description                       | Connector 1     | Connector 2   |
|-----------------------------------|-----------------|---------------|
| Type                              | BNC Male        | SMA Female    |
| Specification                     | MIL-STD-348A    | MIL-STD-348   |
| Impedance                         | 50 Ohms         | 50 Ohms       |
| Mating Cycles                     | 500             |               |
| Contact Material and Plating      | Brass, Gold     | Gold          |
| Contact Plating Specification     | 30 µin minimum  | MIL-G-45204   |
| Dielectric Type                   | PTFE            | PTFE          |
| Body Material and Plating         | Brass, Nickel   | Brass, Nickel |
| Body Plating Specification        | 100 µin minimum | QQ-N-290      |
| Coupling Nut Material and Plating | Brass, Nickel   |               |

**Environmental Specifications**

**Temperature**

Operating Range

-40 to +80 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: [BNC Male to SMA Female Cable 36 Inch Length Using RG174 Coax PE3W08823-36](#)



## BNC Male to SMA Female Cable 36 Inch Length Using RG174 Coax

### RF Cable Assemblies Technical Data Sheet

PE3W08823-36

#### How to Order

Part Number Configuration:

**PE3W08823**

- **xx**

**uu**

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

Example: PE3W08823-12 = 12 inches long cable  
PE3W08823-100cm = 100 cm long cable

BNC Male to SMA Female Cable 36 Inch Length Using RG174 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.

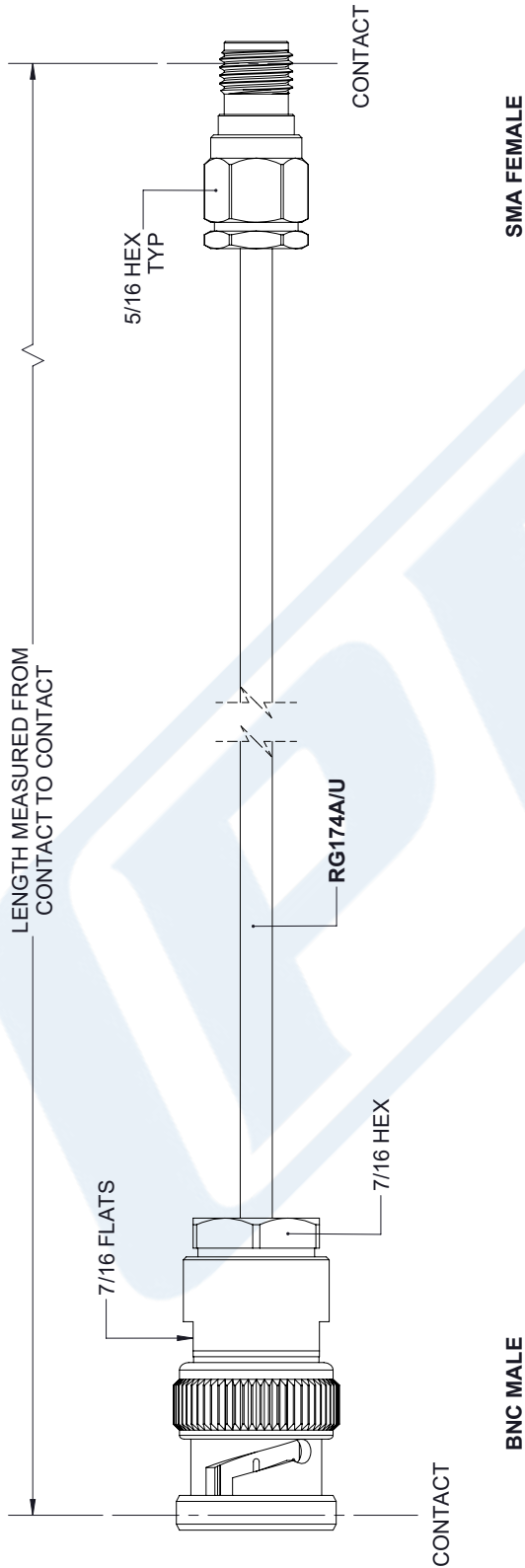
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [BNC Male to SMA Female Cable 36 Inch Length Using RG174 Coax PE3W08823-36](https://www.pasternack.com/bnc-male-sma-female-rg174au-cable-assembly-pe3w08823-36-p.aspx)

URL: <https://www.pasternack.com/bnc-male-sma-female-rg174au-cable-assembly-pe3w08823-36-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.

PE3W08823-36 CAD Drawing  
BNC Male to SMA Female Cable 36 Inch Length Using RG174 Coax

| REVISIONS |                 |           |          |
|-----------|-----------------|-----------|----------|
| REV.      | DESCRIPTION     | DATE      | APPROVED |
| A         | INITIAL RELEASE | 3/13/2020 | SELLIS   |



|  |                 |
|--|-----------------|
| UNLESS OTHERWISE SPECIFIED<br>LEADING DIMENSIONS ARE INCHES<br>DIMENSIONS IN [ ] ARE MILLIMETERS |                 |
| TOLERANCES:  |                 |
| .X = ± .2  | [.08]           |
| .XX = ± .02  | [.51]           |
| .XXX = ± .005  | [.13]           |
| ANGLES   | ± 1°            |
| CABLE LENGTH (L) TOLERANCES:   |                 |
| L ≤ 12 [305]   | ± .1 [25] / -0  |
| 12 [305] < L ≤ 60 [1524]   | ± .2 [51] / -0  |
| 60 [1524] < L ≤ 120 [3048]   | ± .4 [102] / -0 |
| 120 [3048] < L ≤ 300 [7620]  | ± .6 [152] / -0 |
| 300 [7620] < L   | ± .5% L / -0    |
| ALL DIMENSIONS SHOWN<br>ARE FOR REFERENCE ONLY.  |                 |

|   |           |
|---|-----------|
| <b>PE PASTERNAK</b><br>an INFINITI brand  |           |
| Pasternack Enterprises, Inc.<br>P.O. Box 16759, Irvine, CA 92623.<br>Phone: 1.949.261.1920   1.866.727.8376<br>Fax: 1.949.261.7451<br>Website: www.pasternack.com<br>E-mail: sales@pasternack.com |           |
| SIZE  | CAGE CODE |
| A   | 53919     |
| DRAWN BY  | K.DANG    |
| ITEM NO.  | PE3W08823 |
| REV   | A         |

|   |        |
|---|--------|
| THIRD-ANGLE PROJECTION  |        |
| THE INFORMATION AND<br>DESIGN IN THIS DOCUMENT<br>IS THE PROPERTY OF<br>PASTERNAK CORPORATION<br>ALL RIGHTS RESERVED. |        |
| SHEET   | 1 OF 1 |
| SCALE   | N/A    |

THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.