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| SYM | REVISION DESCRIPTION    | DFTM     | DATE     | APPD     | DATE    |
|-----|-------------------------|----------|----------|----------|---------|
| -   | RELEASED FOR PRODUCTION | J. C. L. | 8/20/03  | J. C. L. | 8/20/03 |
| A   | CHANGED PER CDC #36704  | D. J. H. | 1/14/13  | J. D. B. | 1/15/13 |
| B   | CHANGED PER CDC #37206  | J. D. B. | 3/226/13 | J. D. B. | 3/26/13 |



**NOTES:**

- ASSEMBLED CONNECTOR INTERFACE IS DESIGNED IN ACCORDANCE WITH MIL-STD-348.
- MATERIAL: BODY & HEX COUPLING NUT- CORROSION RESISTANT STEEL PER ASTM A582.  
CONTACT - BERYLLIUM COPPER PER ASTM B196.  
INSULATOR - TEFLON PER ASTM D1710  
GASKET - SILICONE RUBBER PER ZZ-R-765  
SHRINK SLEEVE - SHRINKABLE POLYOLEFIN PER MIL-I-23053/5  
FERRULE - D.H.P. COPPER CDA ALLOY 122
- FINISHES: BODY & HEX COUPLING NUT - PASSIVATE PER QQ-P-35  
CONTACT - GOLD PLATE PER MIL-G-45204  
FERRULE - SULFAMATE NICKEL PLATE
- CONTACT PIN IS SOLDERED.
- CRIMP THE FERRULE TO .128" HEX.

|            |   |                      |                |  |                          |
|------------|---|----------------------|----------------|--|--------------------------|
| MATERIAL:  | UNLESS OTHERWISE SPECIFIED  |                      | DFTM. J. C. L. | TIMES MICROWAVE SYSTEMS                          |                          |
|            | ALL DIMENSIONS ARE IN INCHES<br>MACHINED SURFACES FINISH N/A RMS MAX.<br>REMOVE ALL BURRS .005 MAX. BREAK<br>MACHINE CORNERS .005 MAX. FILLET R.<br>TOLERANCES ON DECIMALS<br>.XX ± .03 .XXX ± .005<br>ANGLES ± 1° FRACTIONS ± 1/32 |                      | DATE 8/20/03   |  |                          |
| USED ON: A |   |                      | CHKD. J. C. L. | <b>TC-100-SM</b><br>SMA MALE FOR<br>LMR100 CABLE |                          |
|            |   |                      | DATE 8/20/03   |  |                          |
| SCALE: N/A | DWG. SIZE A   | DO NOT SCALE DRAWING | APPD. J. C. L. | DATE 8/20/03                                     | 1 of 1   SD3190-1551   B |



# TIMES MICROWAVE SYSTEMS

358 Hall Avenue/P.O. Box 5039  
Wallingford, CT 06492-5039  
Tel: 203-949-8400  
FAX: 203-949-8423  
1-800-TMS-COAX  
www.timesmicrowave.com

## INSTALLATION INSTRUCTIONS TC-100-SM (TIMES 3190-1551) (Cable Types: LMR-100)



- 1) A. Trim cable to dimensions shown. Slide shrink sleeve & crimp sleeve back onto cable.  
B. Remove any residual plastic from the center conductor and deburr center conductor using a fine file.



- 2) A. Slide contact onto center conductor leaving a .020 gap as shown and solder to center conductor. Use minimal heat to minimize melting of foam dielectric. Inspect to be sure aluminum foil is not touching center contact.



- 3) A. Insert cable into connector until fully seated, with all braid wires on the outside of connector body and aluminum tape inside connector body.  
B. Slide crimp sleeve forward and crimp as close as possible to body using a .128" hex die. Use Times HX-4 crimp tool or equivalent. Do not crimp rear of crimp sleeve.  
C. Heat shrink weather seal over rear of connector body and down onto cable jacket using hot air gun.



# BNC Female Bulkhead Mount Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch, .480 inch D Hole

## RF Connectors Technical Data Sheet

PE4106

### Configuration

- BNC Female Connector
- 50 Ohms
- Straight Body Geometry
- RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, .100 inch Interface Type
- Crimp/Solder Attachment
- Bulkhead

### Features

- Max. Operating Frequency 1,000 MHz
- Gold Plated Brass Contact
- 30 µin minimum contact plating

### Applications

- General Purpose Test
- Rack and Panel Mount Applications
- Custom Cable Assemblies

### Description

Pasternack's PE4106 BNC female bulkhead connector with crimp/solder attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100 and .100 inch (.480 inch D hole) is part of our full line of RF components available for same-day shipping. Our BNC female connector operates up to a maximum frequency of 1,000 MHz. This BNC bulkhead connector allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications.

Our BNC female bulkhead connector PE4106 datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right connector for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same-day.

### Electrical Specifications

| Description                          | Minimum | Typical | Maximum | Units |
|--------------------------------------|---------|---------|---------|-------|
| Frequency Range                      | DC      |         | 1,000   | MHz   |
| Operating Voltage (AC)               |         |         | 500     | Vrms  |
| Dielectric Withstanding Voltage (AC) |         |         | 1,500   | Vrms  |

### Performance by Frequency

| Description     | F1      | F2 | F3 | F4 | F5 | Units |
|-----------------|---------|----|----|----|----|-------|
| Frequency Range | DC to 1 |    |    |    |    | GHz   |
| VSWR, Max       | 1.6:1   |    |    |    |    |       |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [BNC Female Bulkhead Mount Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch, .480 inch D Hole PE4106](#)



BNC Female Bulkhead Mount Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch, .480 inch D Hole

## RF Connectors Technical Data Sheet

PE4106

### Mechanical Specifications

**Size**

|            |                     |
|------------|---------------------|
| Length     | 1.42 in [36.07 mm]  |
| Width/Dia. | 0.689 in [17.50 mm] |
| Weight     | 0.045 lbs [20.41 g] |

### Material Specifications

| Description  | Material | Plating                   |
|--------------|----------|---------------------------|
| Contact      | Brass    | Gold<br>30 µin minimum    |
| Insulation   | PTFE     |                           |
| Body         | Brass    | Nickel<br>100 µin minimum |
| Crimp Sleeve | Brass    | Nickel                    |
| Washer       | Steel    | Nickel                    |

### Environmental Specifications

**Temperature**

|                 |                   |
|-----------------|-------------------|
| Operating Range | -65 to +165 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 Female Bulkhead Mount Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch, .480 inch D Hole PE4106](#)



BNC Female Bulkhead Mount Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch, .480 inch D Hole

## RF Connectors Technical Data Sheet

PE4106

### Assembly Instruction

BNC Female Bulkhead Mount Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch, .480 inch D Hole 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 Female Bulkhead Mount Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch, .480 inch D Hole PE4106](https://www.pasternack.com/bnc-female-standard-rg174-rg316-rg188-connector-pe4106-p.aspx)

URL: <https://www.pasternack.com/bnc-female-standard-rg174-rg316-rg188-connector-pe4106-p.aspx>

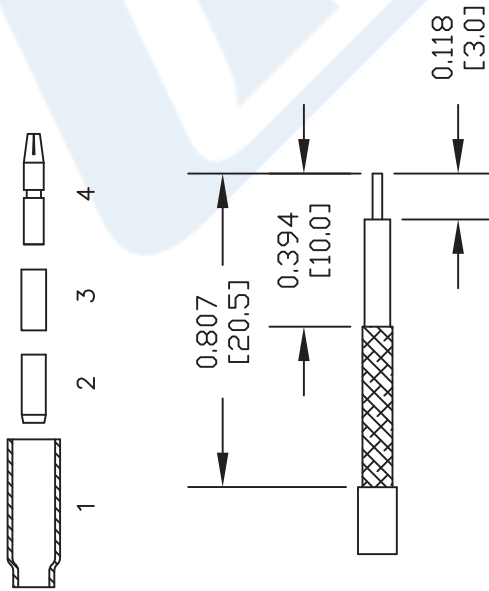
The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such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

# PE4106 CAD Drawing

BNC Female Bulkhead Mount Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch, .480 inch D Hole

## ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN & SLIDE FERRULE (1) ONTO CABLE.
2. FLARE END OF CABLE BRAID & SLIDE METAL SPACER (2) & PTFE (3) SPACER OVER CABLE DIELECTRIC.

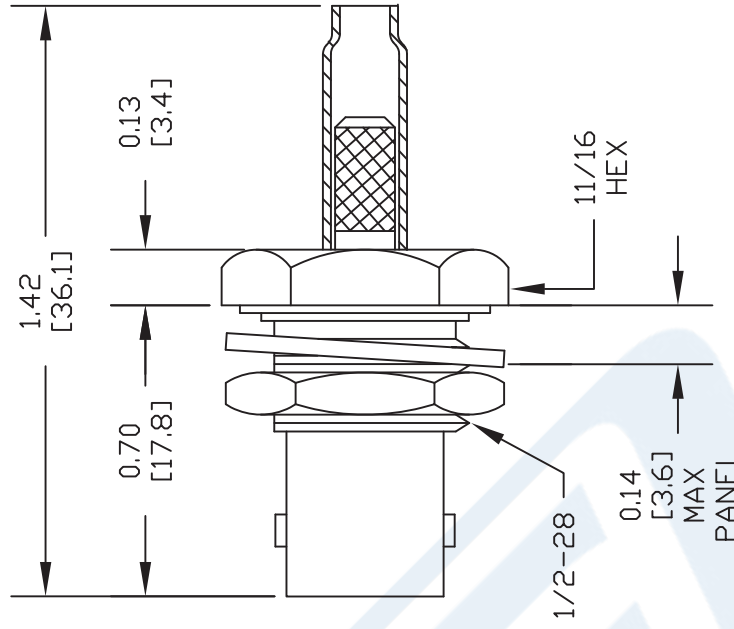


## STRIPPING DIMENSIONS

3. THE CONTACT (4) SHOULD BUTT AGAINST THE DIELECTRIC & PTFE SPACER. CRIMP CONTACT TO CABLE CENTER CONDUCTOR.
4. INSTALL CABLE ASSEMBLY INTO BODY SO THAT THE INNER FERRULE PORTION OF BODY SLIDES UNDER BRAID. PUSH CABLE ASSEMBLY FORWARD UNTIL CONTACT SNAPS INTO PLACE. SLIDE FERRULE OVER BRAID AND UP AGAINST CONNECTOR BODY & CRIMP.

## CRIMP SIZES REQUIRED

CONTACT: .068" HEX CRIMP TOOL  
FERRULE: .178" HEX CRIMP TOOL



DWG TITLE

**PE4106**

NOTES:  
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.  
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.  
3. DIMENSIONS ARE IN INCHES [mm].  
4. FITS MIL-C-17 AND EQUIVALENT CABLES.

**PE PASTERNAK®**  
Pasternack Enterprises, Inc.  
P.O. Box 16759 | Irvine | CA | 92623  
Phone: (949) 261-1920 | Fax: (949) 261-7451  
Website: www.pasternack.com | E-Mail: sales@pasternack.com

REV. B FSCM NO. 53919

CAD FILE 072712

SCALE N/A

SIZE A

2231

# Flexible RG174 Coax Cable Single Shielded with Black PVC Jacket

## RF Cables Technical Data Sheet



RG174A/U

### Configuration

- Flexible Cable
- 1 Shield(s)

### Electrical Specifications

| Description             | Minimum | Typical        | Maximum | Units        |
|-------------------------|---------|----------------|---------|--------------|
| Frequency Range         | DC      |                | 1,000   | MHz          |
| Impedance               |         | 50             |         | Ohms         |
| Velocity of Propagation |         | 66             |         | %            |
| Nominal Capacitance     |         | 31.08 [101.97] |         | pF/ft [pF/m] |

### Performance by Frequency Band

| Description      | F1    | F2    | F3     | F4 | F5 | Units               |
|------------------|-------|-------|--------|----|----|---------------------|
| Frequency        | 100   | 400   | 1,000  |    |    | MHz                 |
| Attenuation, Typ | 8.4   | 27.56 | 32     |    |    | dB/100ft<br>dB/100m |
|                  | 27.56 | 90.42 | 104.99 |    |    |                     |

### Mechanical Specifications

Diameter 0.11 in [2.79 mm]  
Weight 0.009 lbs/ft [0.01 Kg/m]

### Construction Specifications

| Description     | Material and Plating         | Diameter           |
|-----------------|------------------------------|--------------------|
| Inner Conductor | Copper Clad Steel, 7 Strands | 0.019 in [0.48 mm] |
| Conductor Type  | Stranded                     |                    |
| Dielectric      | PE                           | 0.06 in [1.52 mm]  |
| First Shield    | Tinned Copper Braid          | 0.078 in [1.98 mm] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG174 Coax Cable Single Shielded with Black PVC Jacket RG174A/U](#)

Flexible RG174 Coax Cable Single  
Shielded with Black PVC Jacket

RF Cables Technical Data Sheet

RG174A/U

|        |            |                   |
|--------|------------|-------------------|
| Jacket | PVC, Black | 0.11 in [2.79 mm] |
|--------|------------|-------------------|

**Environmental Specifications**

**Temperature**

Operating Range

-40 to +80 deg C

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

**Plotted and Other Data**

Notes:

Flexible RG174 Coax Cable Single Shielded with Black PVC Jacket 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: [Flexible RG174 Coax Cable Single Shielded with Black PVC Jacket RG174A/U](#)

URL: <https://www.pasternack.com/flexible-0.100-rg174-50-ohm-coax-cable-pvc-jacket-rg174a-u-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.

# RG174A/U CAD Drawing

Flexible RG174 Coax Cable Single Shielded with Black PVC Jacket



NOTES:  
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.  
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.  
3. DIMENSIONS ARE IN INCHES [mm].

|                 |        |
|-----------------|--------|
| DWG TITLE       |        |
| <b>RG174A/U</b> |        |
| FSCM NO.        | 53919  |
| CAD FILE        | 111716 |
| SCALE           | N/A    |
| SIZE            | A      |
|                 | 41742  |

**PE PASTERNAK**  
THE ENGINEER'S RF SOURCE  
Pasternack Enterprises, Inc.  
P.O. Box 16759 | Irvine | CA | 92623  
Phone: (949) 261-1920 | Fax: (949) 261-7451  
Website: www.pasternack.com | E-Mail: sales@pasternack.com