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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

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## 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.



SMA Female Bulkhead Mount Connector Crimp/Solder Attachment for RG316, RG174, RG188, PE-B100, PE-C100, .100 inch, LMR-100, .235 inch D Hole

RF Connectors Technical Data Sheet

PE4427

**Configuration**

- SMA Female Connector
- MIL-STD-348
- 50 Ohms
- Straight Body Geometry
- RG316, RG174, RG188, PE-B100, PE-C100, .100 inch, LMR-100 Interface Type
- Crimp/Solder Attachment
- Bulkhead

**Features**

- Gold Plated Beryllium Copper Contact
- Contact plating according to MIL-G-45204

**Applications**

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

**Description**

Pasternack's PE4427 SMA female bulkhead connector with crimp/solder attachment for RG316, RG174, RG188, PE-B100, PE-C100, .100 inch and LMR-100 (.235 inch D hole) is part of our full line of RF components available for same-day shipping. This SMA 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 SMA female bulkhead connector PE4427 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.

**Mechanical Specifications**

|             |                    |
|-------------|--------------------|
| <b>Size</b> |                    |
| Length      | 0.9 in [22.86 mm]  |
| Width/Dia.  | 0.312 in [7.92 mm] |
| Weight      | 0.008 lbs [3.63 g] |

**Material Specifications**

| Description     | Material         | Plating          |
|-----------------|------------------|------------------|
| Contact         | Beryllium Copper | Gold MIL-G-45204 |
| Outer Conductor | Brass            | Nickel           |
| Body            | Brass            | Nickel           |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Female Bulkhead Mount Connector Crimp/Solder Attachment for RG316, RG174, RG188, PE-B100, PE-C100, .100 inch, LMR-100, .235 inch D Hole PE4427](#)



SMA Female Bulkhead Mount Connector Crimp/Solder Attachment for RG316, RG174, RG188, PE-B100, PE-C100, .100 inch, LMR-100, .235 inch D Hole

**Environmental Specifications**

**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: [SMA Female Bulkhead Mount Connector Crimp/Solder Attachment for RG316, RG174, RG188, PE-B100, PE-C100, .100 inch, LMR-100, .235 inch D Hole PE4427](#)

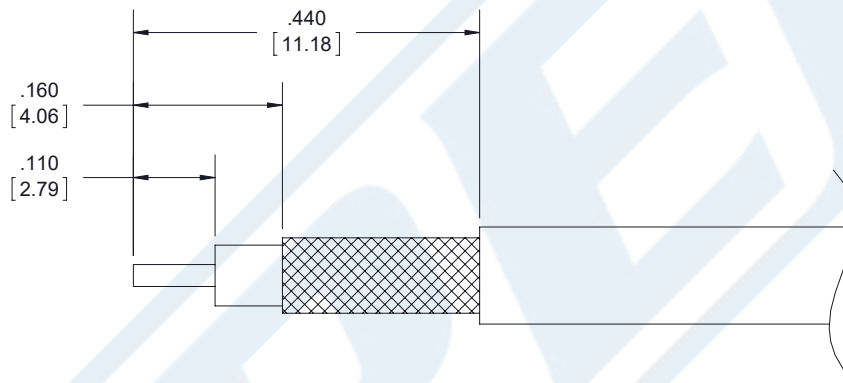


SMA Female Bulkhead Mount Connector Crimp/Solder Attachment for RG316, RG174, RG188, PE-B100, PE-C100, .100 inch, LMR-100, .235 inch D Hole

## RF Connectors Technical Data Sheet

PE4427

### Assembly Instruction



### ASSEMBLY PROCEDURES

1. STRIP CABLE TO THE DIMENSIONS SHOWN, DO NOT NICK CENTER CONDUCTOR OR BRAID.
2. SLIDE FERRULE OVER CABLE.
3. PUSH CENTER CONDUCTOR FULLY INTO CONTACT AND SOLDER, REMOVE ANY EXCESS SOLDER.
4. FLAIR BRAID AND INSERT CONTACT INTO THE BODY UNTIL IT SEATS.
5. SLIDE FERRULE OVER BRAID AND CRIMP.

### CRIMP SIZE REQUIRED

- FERRULE: A.128" HEX CRIMP TOOL.
- CONTACT: SOLDER.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Female Bulkhead Mount Connector Crimp/Solder Attachment for RG316, RG174, RG188, PE-B100, PE-C100, .100 inch, LMR-100, .235 inch D Hole PE4427](#)



SMA Female Bulkhead Mount Connector Crimp/Solder Attachment for RG316, RG174, RG188, PE-B100, PE-C100, .100 inch, LMR-100, .235 inch D Hole

## RF Connectors Technical Data Sheet

PE4427

SMA Female Bulkhead Mount Connector Crimp/Solder Attachment for RG316, RG174, RG188, PE-B100, PE-C100, .100 inch, LMR-100, .235 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.

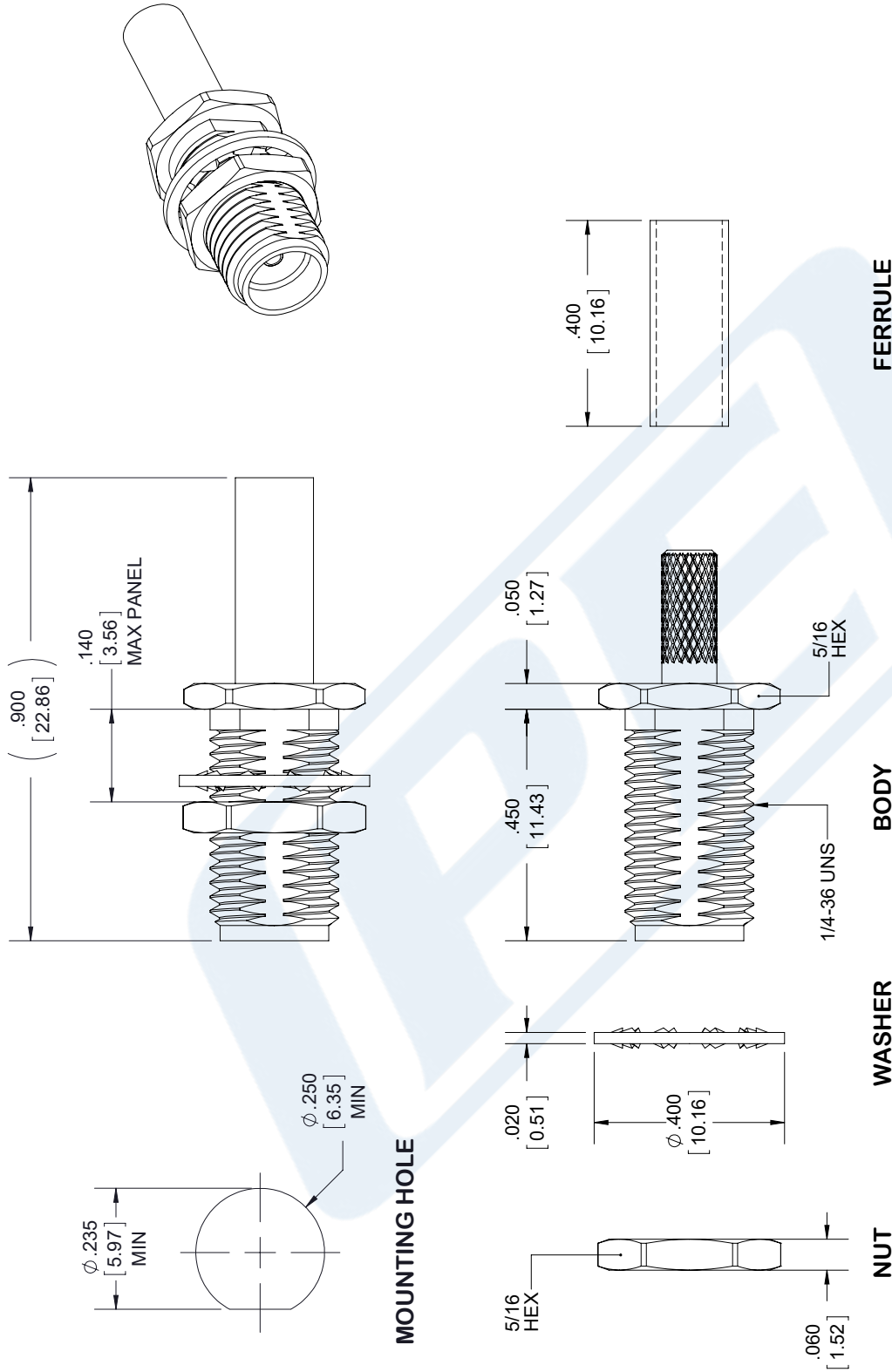
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Female Bulkhead Mount Connector Crimp/Solder Attachment for RG316, RG174, RG188, PE-B100, PE-C100, .100 inch, LMR-100, .235 inch D Hole PE4427](https://www.pasternack.com/sma-female-rg316-rg174-rg188-pe-b100-pe-c100-.100-inch-lmr-100-.235-inch-d-hole-pe4427-p.aspx)

URL: <https://www.pasternack.com/sma-female-rg316-rg174-pe-b100-pe-c100-.100-connector-pe4427-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.

# PE4427 CAD Drawing

SMA Female Bulkhead Mount Connector Crimp/Solder Attachment for RG316, RG174, RG188, PE-B100, PE-C100, .100 inch, LMR-100, .235 inch D Hole



| STANDARD TOLERANCES |
|---------------------|
| .X ±0.2             |
| .XX ±0.01           |
| .XXX ±0.005         |

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES



Pasternack Enterprises, Inc.  
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 Website: www.pasternack.com | E-Mail: sales@pasternack.com

DWG TITLE  
**PE4427**

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].

|           |        |
|-----------|--------|
| CAGE CODE | 53919  |
| SCALE     | N/A    |
| SIZE      | A      |
| CAD FILE  | 092917 |
|           | 7361   |

# 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

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

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**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.

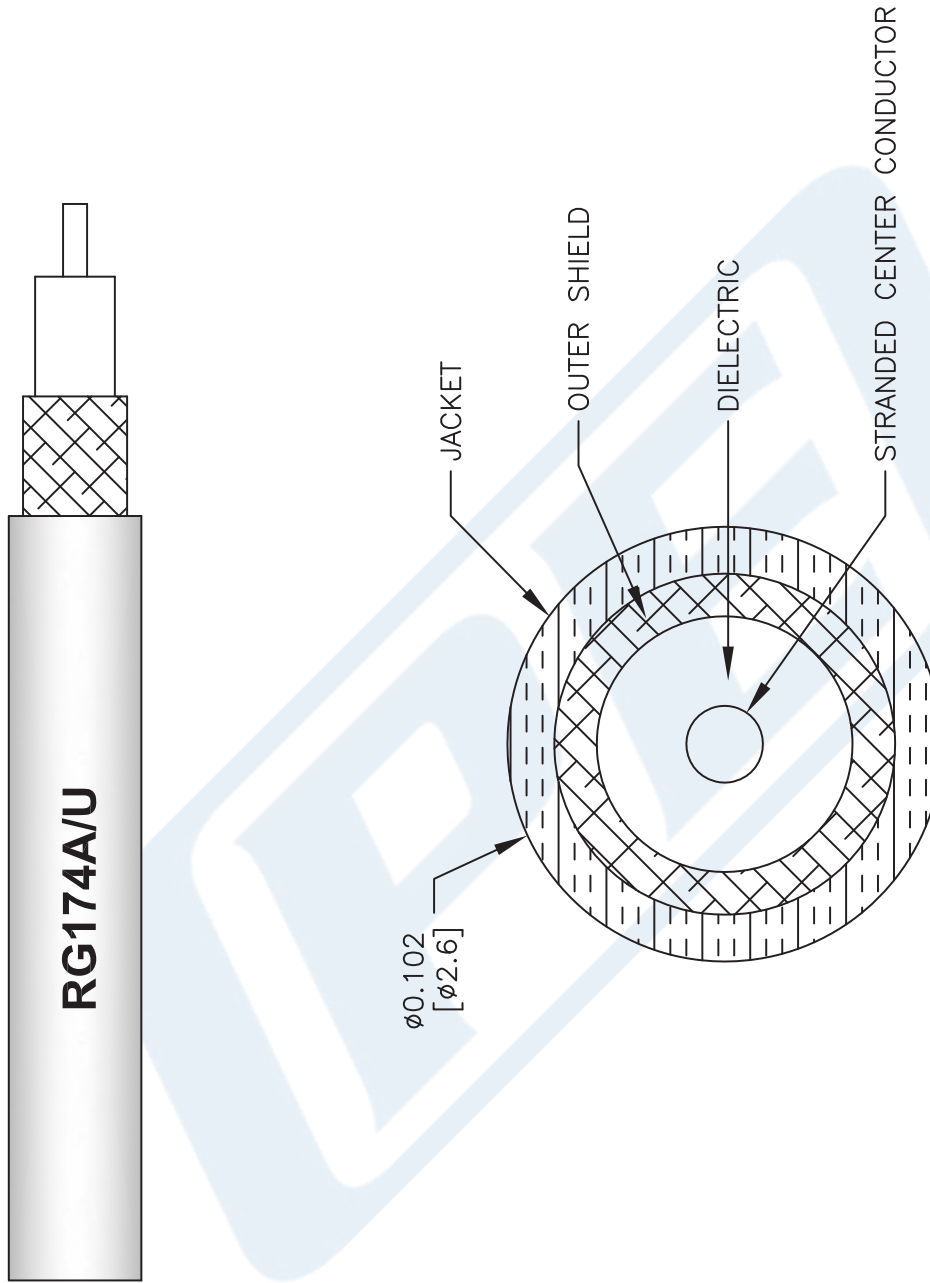
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG174 Coax Cable Single Shielded with Black PVC Jacket RG174A/U](#)

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

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# RG174A/U CAD Drawing

Flexible RG174 Coax Cable Single Shielded with Black PVC Jacket



NOTES:  
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 3. DIMENSIONS ARE IN INCHES [mm].

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

**PE PASTERNAK**  
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