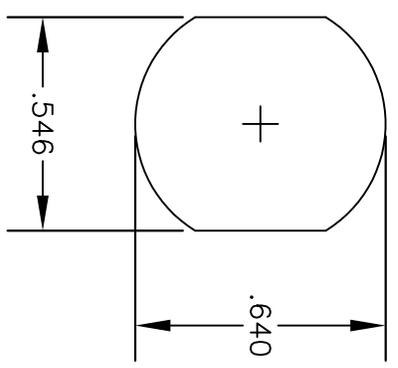


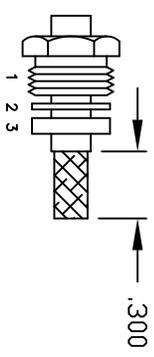
|                  |                     |
|------------------|---------------------|
| <b>MATERIALS</b> |                     |
| BODY             | BRASS NICKEL PLATED |
| CONTACT          | GOLD PLATED         |
| INSULATOR        | PTFE                |

MOUNTING HOLE

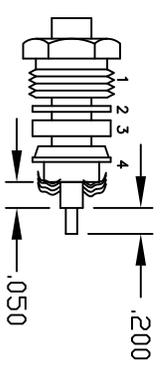


ASSEMBLY PROCEDURES

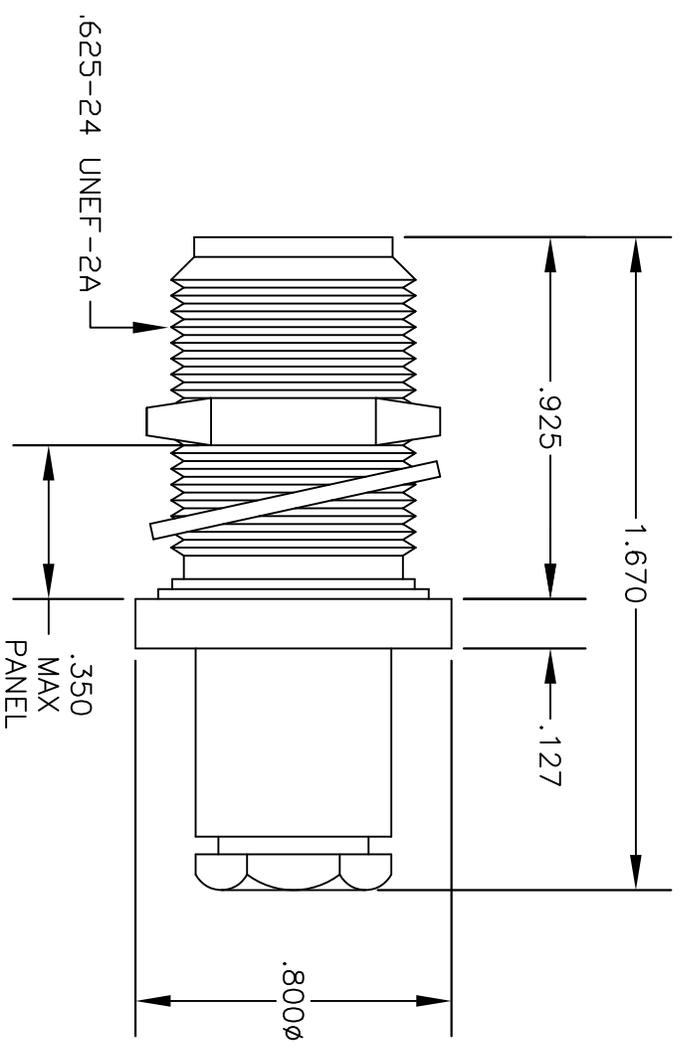
1. SLIDE CLAMP NUT (1), WASHER (2) & GASKET (3) OVER CABLE. STRIP CABLE AS SHOWN. DO NOT NICK BRAID WHILE CUTTING JACKET. TAPER END OF BRAID TO PERMIT ASSEMBLY OF BRAID CLAMP (4). SLIDE BRAID CLAMP (4) OVER BRAID & SEAT AGAINST CABLE.



2. FORM BRAID OVER CLAMP NUT (4). TRIM BRAID BACK TO SHOULDER. CUT DIELECTRIC & CENTER CONDUCTOR TO DIMENSION SHOWN. DO NOT NICK CENTER CONDUCTOR. SOLDER CONTACT TO CENTER CONDUCTOR. REMOVE EXCESS SOLDER. DO NOT OVER HEAT DIELECTRIC. INSERT CABLE ASSEMBLY INTO BODY & TIGHTEN.



NOTE: INSERT PTFE BEFORE CONTACT. WITH LARGE OPEN END SLIDING OVER CENTER CONDUCTOR & DIELECTRIC.



**PASTERNAK ENTERPRISES, INC.**  
 P.O. BOX 16759, IRVINE, CA 92623  
 PHONE (949) 261-1920 FAX (949) 261-7451  
 WEB ADDRESS: [www.pasternack.com](http://www.pasternack.com)  
 E-MAIL ADDRESS: [sales@pasternack.com](mailto:sales@pasternack.com)  
**COAXIAL & FIBER OPTICS**

DWG TITLE: **PE4441**  
 DES. N FEMALE, BULKHEAD, CLAMP ATTACHMENT FOR RG174, RG188 & RG316

|        |                |          |        |       |     |     |
|--------|----------------|----------|--------|-------|-----|-----|
| SIZE A | FSCM NO. 53919 | CAD FILE | 051502 | SCALE | N/A | 127 |
|--------|----------------|----------|--------|-------|-----|-----|

NOTES:  
 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.  
 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.



## SMA Male Right Angle Connector Crimp/Solder Attachment for RG316, RG174, RG188

### RF Connectors Technical Data Sheet

PE45144

#### Configuration

- SMA Male Connector
- 50 Ohms
- Right Angle Body Geometry
- Connector Interface Types: RG316, RG174, RG188
- 5/16 in Hex

#### Features

- Max. Operating Frequency 12.4 GHz
- Gold Plated Brass Contact

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE45144 SMA male right angle connector with crimp/solder attachment for RG316, RG174 and RG188 is part of our full line of RF components available for same-day shipping. Our SMA male connector operates up to a maximum frequency of 12.4 GHz. Its right angle body geometry allows for easier connections in tight spaces.

Our SMA male right angle connector PE45144 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      |         | 12.4    | GHz   |

#### Mechanical Specifications

| Size          |                     |
|---------------|---------------------|
| Length        | 0.512 in [13 mm]    |
| Width/Dia.    | 0.689 in [17.50 mm] |
| Weight        | 0.015 lbs [6.8 g]   |
| Mating Torque | 5 in-lbs [0.57 Nm]  |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Right Angle Connector Crimp/Solder Attachment for RG316, RG174, RG188 PE45144](#)



SMA Male Right Angle Connector Crimp/Solder Attachment for RG316, RG174, RG188

RF Connectors  
Technical Data Sheet

PE45144

**Material Specifications**

| Description  | Material | Plating |
|--------------|----------|---------|
| Contact      | Brass    | Gold    |
| Insulation   | Teflon   |         |
| Body         | Brass    | Gold    |
| Coupling Nut | Brass    | Gold    |

**Environmental Specifications**

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

**Plotted and Other Data**

Notes:

SMA Male Right Angle Connector Crimp/Solder Attachment for RG316, RG174, RG188 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 Male Right Angle Connector Crimp/Solder Attachment for RG316, RG174, RG188 PE45144](#)

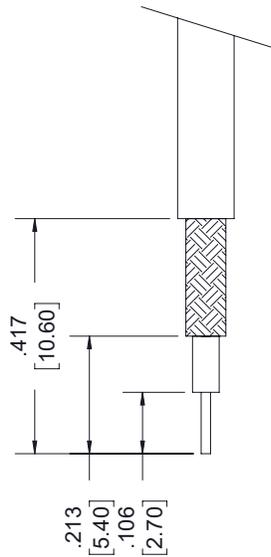
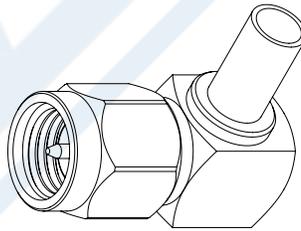
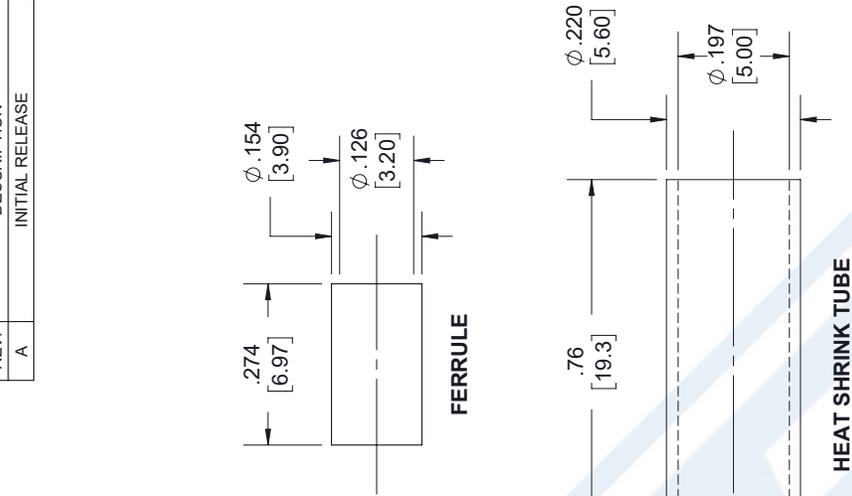
URL: <https://www.pasternack.com/sma-male-rg316-rg174-rg188-connector-pe45144-p.aspx>

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.

# PE45144 CAD Drawing

SMA Male Right Angle Connector Crimp/Solder Attachment for RG316, RG174, RG188

| REVISIONS |                 |           |          |
|-----------|-----------------|-----------|----------|
| REV.      | DESCRIPTION     | DATE      | APPROVED |
| A         | INITIAL RELEASE | 1/21/2020 | S. ELLIS |

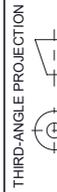


### STRIPPING DIMENSIONS

- NOTES:
- CABLE ATTACHMENT:
    - OUTER: CRIMP.
    - INNER: SOLDER.
  - CRIMP SIZE REQUIRED:
    - FERRULE: .128 [3.25] HEX. CRIMP TOOL.
    - CONTACT: SOLDER.

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:  
 .X = ± .2 [5.08] FRACTIONS ± 1/32  
 .XX = ± .02 [ .51] ANGLES ± 1°  
 .XXX = ± .005 [ .13] 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 ARE FOR REFERENCE ONLY.



THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION ALL RIGHTS RESERVED.

SHEET 1 OF 1  
 SCALE N/A  
 REV A



Pasternack Enterprises, Inc.  
 P. O. Box 16759, Irvine, CA 92623.  
 Phone: 1.949.261.1920 | 1.866.727.8376  
 Fax: 1.949.261.7451  
 Website: www.pasternack.com  
 E-mail: sales@pasternack.com

|      |           |          |          |     |
|------|-----------|----------|----------|-----|
| SIZE | CAGE CODE | DRAWN BY | ITEM NO. | REV |
| A    | 53919     | K. DANG  | PE45144  | A   |

## Flexible RG316 Coax Cable Single Shielded with Tan FEP Jacket

### RF Cables Technical Data Sheet

RG316/U

#### Configuration

- Flexible Cable
- 1 Shield(s)

#### Features

- High Flexibility
- FEP Jacket
- Velocity of Propagation 69%

#### Applications

- General Purpose
- Antenna Feeds
- Communication Systems
- Wireless Systems
- Indoor / Outdoor Uses
- High Temperature Applications
- High Flexibility Applications
- Jumper Cable Assemblies

#### Description

Flexible coaxial cable are ideal for applications where tight bends and continual flexure are required. Pasternack's RG316/U is a single shielded flexible coax cable with FEP jacket and compatible with a wide selection of connector types. This RG316/U coaxial cable has a stranded inner conductor for better flexibility and operates up to 3 GHz. The FEP jacket of this RG316/U coax cable makes it suitable for indoor/outdoor uses and high temperature applications. RG316/U datasheet specifications and outline drawing for this flexible cable are shown in the PDF below.

Pasternack carries a wide range of cables ready to ship same day to fit your needs. They are available in corrugated, flexible, formable or semi-rigid versions with different constructions of conductor materials, dielectric materials, shielding configurations and jacket materials. Our cables are designed to fit a wide range of performance criteria including attenuation, operating temperature, environmental factor, and power capability.

#### Electrical Specifications

| Description                          | Minimum | Typical | Maximum     | Units  |
|--------------------------------------|---------|---------|-------------|--------|
| Frequency Range                      | DC      |         | 3           | GHz    |
| Impedance                            |         | 50      |             | Ohms   |
| Velocity of Propagation              |         | 69      |             | %      |
| Operating Voltage (AC)               |         |         | 900         | Vrms   |
| Dielectric Withstanding Voltage (AC) |         |         | 2,000       | Vrms   |
| Jacket Spark                         |         |         | 2,000       | Vrms   |
| Nominal Capacitance                  |         |         | 32 [104.99] | [pF/m] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG316 Coax Cable Single Shielded with Tan FEP Jacket RG316/U](#)

## Flexible RG316 Coax Cable Single Shielded with Tan FEP Jacket

### RF Cables Technical Data Sheet

RG316/U

#### Performance by Frequency Band

| Description      | F1    | F2    | F3   | F4     | F5     | Units    |
|------------------|-------|-------|------|--------|--------|----------|
| Frequency        | 0.05  | 0.1   | 0.4  | 1      | 3      | GHz      |
| Attenuation, Typ | 7.5   | 11    | 21   | 38     | 58     | dB/100ft |
|                  | 24.61 | 36.09 | 68.9 | 124.67 | 190.29 | dB/100m  |

#### Mechanical Specifications

|          |                         |
|----------|-------------------------|
| Diameter | 0.102 in [2.59 mm]      |
| Weight   | 0.01 lbs/ft [0.01 Kg/m] |

#### Construction Specifications

| Description     | Material and Plating                       | Diameter           |
|-----------------|--|--------------------|
| Inner Conductor | Copper Clad Steel, Silver7                 | 0.02 in 0.51 mm    |
| Conductor Type  | Stranded                                   |                    |
| Dielectric      | PTFE                                       | 0.06 in 1.52 mm    |
| First Shield    | Silver Plated Copper Braid<br>95% coverage | 0.081 in 2.06 mm   |
| Jacket          | FEP, Tan                                   | 0.102 in [2.59 mm] |

#### Environmental Specifications

|                                |                   |
|--------------------------------|-------------------|
| Temperature<br>Operating Range | -55 to +200 deg C |
|--------------------------------|-------------------|

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG316 Coax Cable Single Shielded with Tan FEP Jacket RG316/U](#)

## Flexible RG316 Coax Cable Single Shielded with Tan FEP Jacket

### RF Cables Technical Data Sheet

RG316/U

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

#### Plotted and Other Data

Notes:

Flexible RG316 Coax Cable Single Shielded with Tan FEP 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.

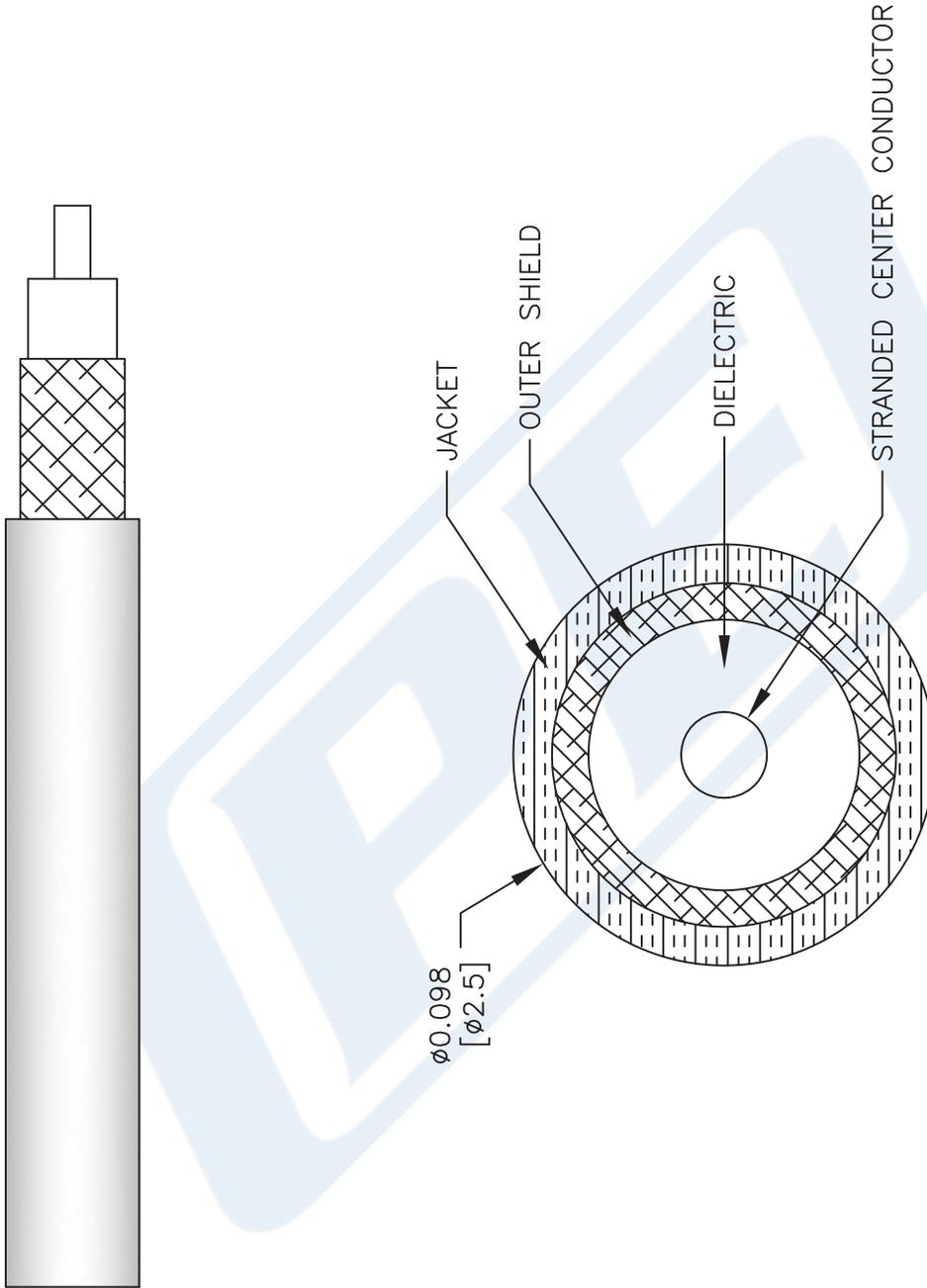
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG316 Coax Cable Single Shielded with Tan FEP Jacket RG316/U](#)

URL: <https://www.pasternack.com/flexible-rg316u-fep-jacket-silver-plated-copper-braid-outer-conductor-single-shielded-rg316-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.

# RG316/U CAD Drawing

Flexible RG316 Coax Cable Single Shielded with Tan FEP 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  
**RG316/U**

FSCM NO. 53919

41742

SIZE A

SCALE N/A

111716

CAD FILE

**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](http://www.pasternack.com) | E-Mail: [sales@pasternack.com](mailto:sales@pasternack.com)