# PASTERNACK
## an INFINITE brand

SMA Male Connector Crimp/Solder Attachment
for RG174, RG316, RG188 Gold Plated

## RF Connectors
## Technical Data Sheet                                                      PE45145

### Configuration

- SMA Male Connector
- 50 Ohms
- Straight Body Geometry

- Connector Interface Types: RG174, RG316, 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 PE45145 SMA male connector with crimp/solder attachment for RG174, RG316 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.

Our SMA male connector PE45145 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                     0.654 in [16.61 mm]
Weight                     0.011 lbs [4.99 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 Connector Crimp/Solder Attachment for RG174, RG316, RG188 Gold Plated PE45145

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SMA Male Connector Crimp/Solder Attachment
for RG174, RG316, RG188 Gold Plated

# RF Connectors
# Technical Data Sheet                                    PE45145

**Material Specifications**

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

**Environmental Specifications**

**Compliance Certifications** (see product page for current document)
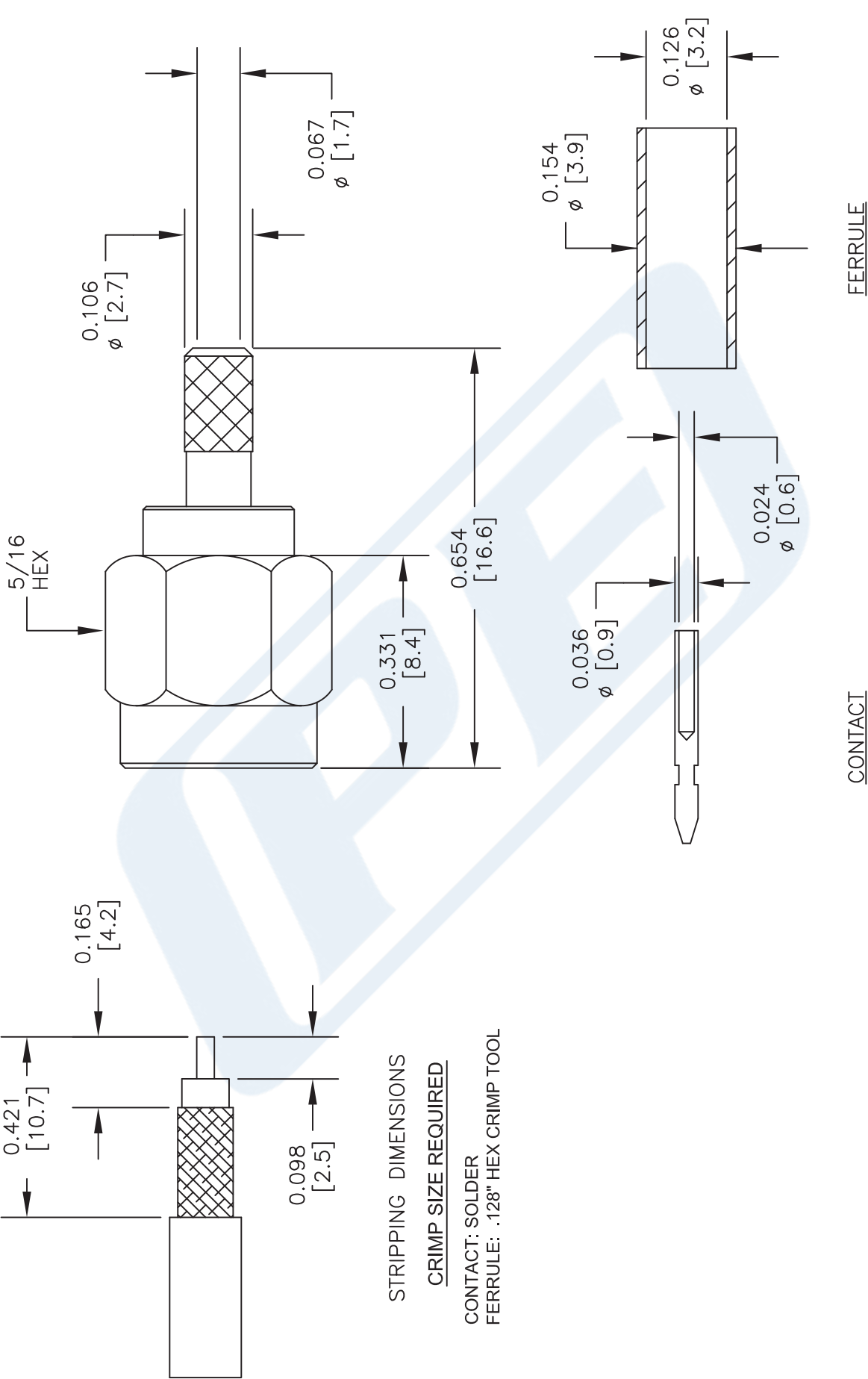
**Plotted and Other Data**
Notes:

SMA Male Connector Crimp/Solder Attachment for RG174, RG316, RG188 Gold Plated 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 Connector Crimp/Solder Attachment for RG174, RG316, RG188 Gold Plated PE45145

URL: https://www.pasternack.com/sma-male-rg174-rg316-rg188-connector-pe45145-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.

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# PE45145 CAD Drawing

## SMA Male Connector Crimp/Solder Attachment for RG174, RG316, RG188 Gold Plated

0.067 ∅ [1.7]

0.106 ∅ [2.7]

5/16 HEX

0.654 [16.6]

0.331 [8.4]

FERRULE

0.126 ∅ [3.2]

0.154 ∅ [3.9]

0.024 ∅ [0.6]

0.036 ∅ [0.9]

CONTACT

STRIPPING DIMENSIONS

0.165 [4.2]

0.421 [10.7]

0.098 [2.5]

**CRIMP SIZE REQUIRED**

CONTACT: SOLDER
FERRULE: .128" HEX CRIMP TOOL

**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.

| DWG TITLE | | |
|---|---|---|
| **PE45145** | FSCM NO. | 53919 |

| CAD FILE | 012815 |
| SCALE | N/A |
| SIZE | A |
| | 150 |

PE45145  REV 1.1

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# SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, LMR-100A

## RF Connectors
## Technical Data Sheet

**PE45497**

## Configuration

- SSMC Plug Connector
- 50 Ohms
- Right Angle Body Geometry
- Connector Interface Types: RG316, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, LMR-100A

## Features

- Max. Operating Frequency 12.4 GHz
- Good VSWR of 1.62:1
- Gold Plated Beryllium Copper Contact
- Contact plating according to MIL-G-45204
- Reliable threaded coupling
- Small SSMC connector form factor (50% smaller than SMA, radially)
- IEC 60169-20 SSMC connector interface
- In stock and ready to ship

## Applications

- General Purpose Test
- Custom Cable Assemblies
- Avionics
- A/D Modules
- Data Acquisition
- Software defined radio (SDR)
- RADAR/SONAR
- Ultra Wideband Digital Receivers
- Medical equipment

## Description

Pasternack's PE45497 SSMC plug right angle connector with crimp/solder attachment for RG316, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR and LMR-100A is part of our full line of RF components available for same-day shipping. Our SSMC plug connector operates up to a maximum frequency of 12.4 GHz and offers good VSWR of 1.62:1. Its right angle body geometry allows for easier connections in tight spaces.

Our SSMC plug right angle connector PE45497 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 |
| VSWR | | | 1.62:1 | |
| Insertion Loss | | | 0.3 | dB |
| Operating Voltage (AC) | | | 250 | Vrms |
| High Potential Voltage 5 MHz | | | 400 | Vrms |
| Inner Conductor DC Resistance | | | 4 | mOhms |
| Outer Conductor DC Resistance | | | 1 | mOhms |
| Insulation Resistance | 1,000 | | | MOhms |
| RF Leakage | -50 | | | dB |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, LMR-100A PE45497

SSMC Plug Right Angle Connector Crimp/Solder
Attachment for RG316, RG188, RG174, PE-C100-
LSZH, PE-B100, LMR-100A-FR, LMR-100A

## RF Connectors
## Technical Data Sheet                                        PE45497

### Mechanical Specifications

**Size**

| | |
|---|---|
| Length | 0.421 in [10.69 mm] |
| Width/Dia. | 0.156 in [3.96 mm] |
| Height | 0.33 in [8.38 mm] |
| Weight | 0.007 lbs [3.18 g] |
| Mating Cycles | 500 Cycles |
| Mating Torque | 1.75 to 2 in-lbs [0.20 to 0.23 Nm] |

### Material Specifications

| Description | Material | Plating |
|---|---|---|
| Contact | Beryllium Copper | Gold MIL-G-45204 |
| Insulation | Teflon | |
| Body | Brass | Gold MIL-G-45204 |
| Coupling Nut | Beryllium Copper | Gold MIL-G-45204 |
| Crimp Sleeve | Brass | Gold MIL-G-45204 |

### Environmental Specifications
**Temperature**

| | |
|---|---|
| Operating Range | -65 to +165 deg C |
| Shock | Method 213, Condition B, 75G @6ms @1/2 sine |
| Vibration | Method 204, Condition D (20G) |
| Salt Spray | Method 101, Condition B, 5% salt solution |

### 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: SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, LMR-100A PE45497

## SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, LMR-100A
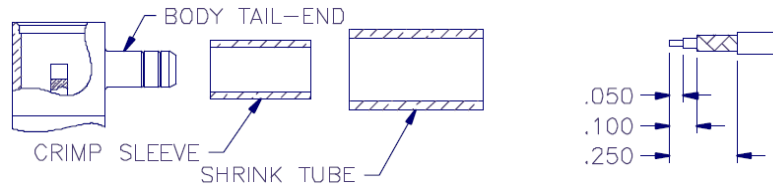
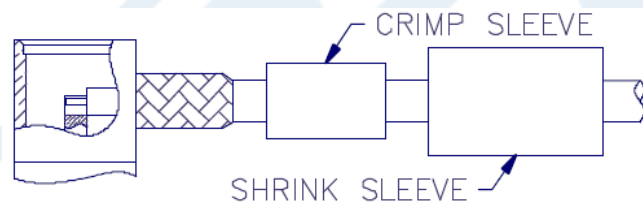### RF Connectors
### Technical Data Sheet
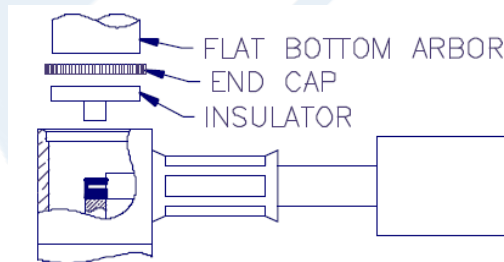
**PE45497**

**Assembly Instruction**



Assembly Instructions

1. TRIM CABLE AS SHOWN ABOVE.  TIN END OF CENTER CONDUCTOR.
2. SLIDE CRIMP SLEEVE AND SHRINK TUBE **(IF SUPPLIED)** OVER CABLE JACKET.
3. FLARE CABLE BRAID OUT SLIGHTLY BY ROTATING DIELECTRIC.



4. INSERT CABLE ASSEMBLY INTO BODY TAIL-END MAKING SURE TAIL GOES OVER DIELECTRIC AND UNDER BRAID.  SLIDE IN UNTIL BRAID TOUCHES REAR SURFACE OF BODY.
5. SLIDE CRIMP SLEEVE FORWARD AND USE .128 HEX DIE TO CRIMP SLEEVE TO BRAID.



6. SOLDER CENTER CONDUCTOR OF CABLE TO CONTACT.
7. PLACE INSULATOR AND END CAP INTO CONNECTOR BODY AS SHOWN AND USE A .185″ DIAMETER FLAT BOTTOM PUNCH TO PRESS CAP IN PLACE.  CAP MUST BE BELOW SURFACE TO SEAT PROPERLY.
8. SLIDE SHRINK TUBE (IF SUPPLIED) OVER CRIMP SLEEVE AND SHRINK TO FIT.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, LMR-100A PE45497

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SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, LMR-100A

**RF Connectors**
**Technical Data Sheet** PE45497

SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, LMR-100A 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.
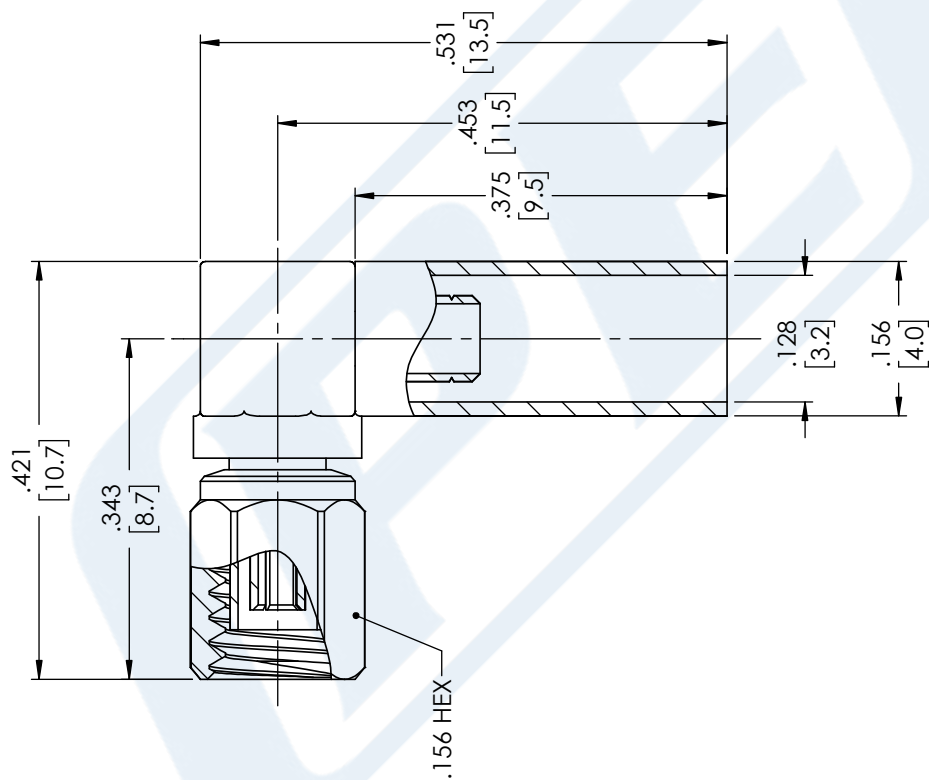
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, LMR-100A PE45497

URL: https://www.pasternack.com/ssmc-plug-rg316-rg188-pe-c100-lszh-pe-b100-fr-connector-pe45497-p.aspx

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# PE45497 CAD Drawing

## SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, LMR-100A



.531 [13.5]

.453 [11.5]

.375 [9.5]

.421 [10.7]

.343 [8.7]

.128 [3.2]

.156 [4.0]

.156 HEX

**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].

| | |
|---|---|
| CAD FILE | 08/13/18 |
| SIZE | A |
| SCALE | N/A |
| | CN2245 |

**DWG TITLE** PE45497

**CAGE CODE** 53919

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

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

**PASTERNACK**
*THE ENGINEER'S RF SOURCE*

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PE45497 REV 1.1

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# PASTERNACK
### an INFINIT℮ brand

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

RG316/U REV 1.5

## 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 95% coverage | 0.081 in 2.06 mm |
| Jacket | FEP, Tan | 0.102 in [2.59 mm] |

### Environmental Specifications
**Temperature**
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

RG316/U  REV 1.5                    2

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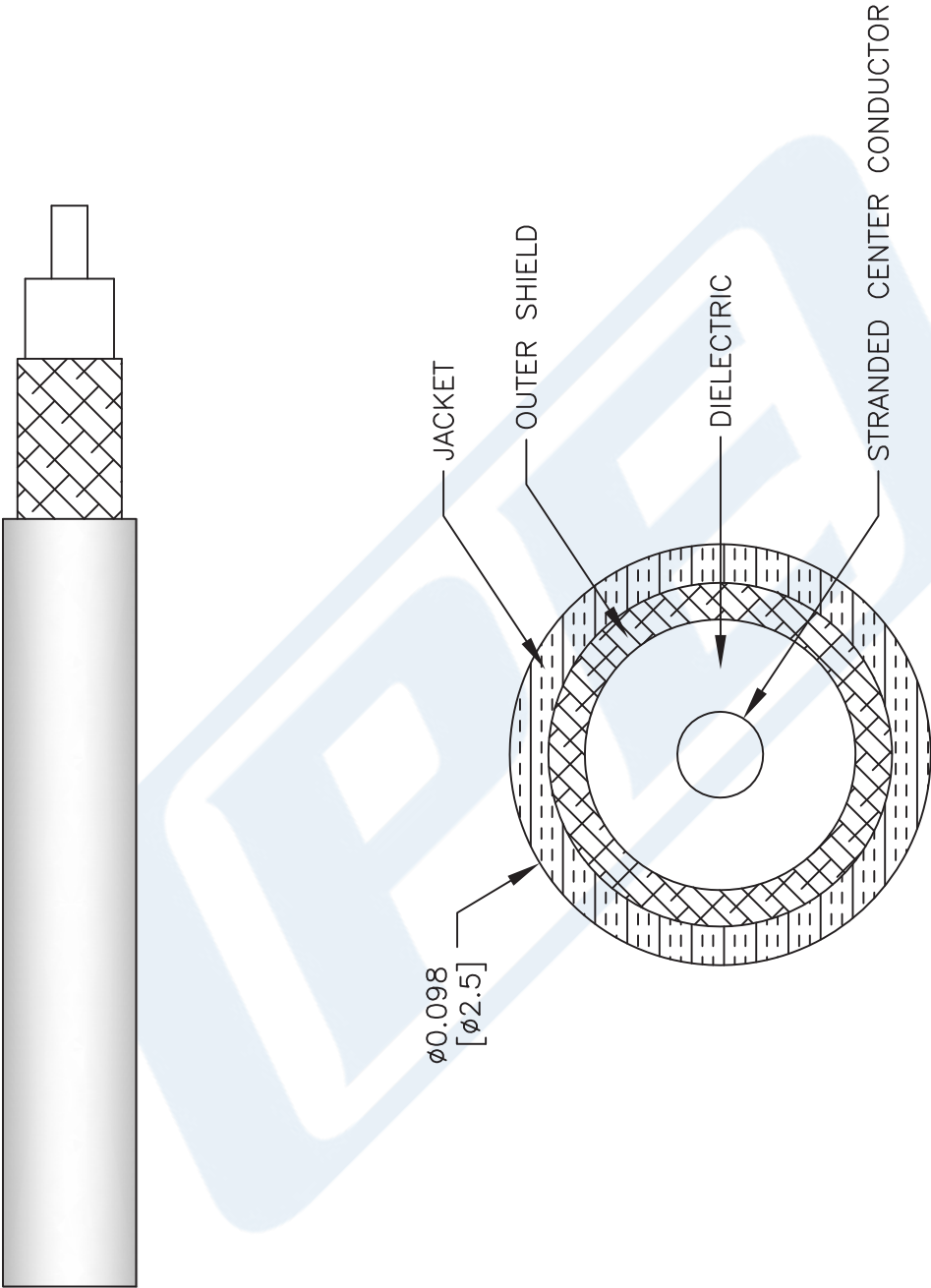
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: Flexible RG316 Coax Cable Single Shielded with Tan FEP Jacket RG316/U

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.

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# RG316/U CAD Drawing

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



JACKET

OUTER SHIELD

DIELECTRIC

STRANDED CENTER CONDUCTOR

Ø0.098 [Ø2.5]

**NOTES:**
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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 | |
| CAD FILE | 111716 | |
| SCALE N/A | | |
| SIZE A | 41742 | |

RG316/U REV 1.5

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