



## Non-Magnetic SMA Female Bulkhead Mount Connector, Crimp/Solder Attachment for RG174U .236 inch D Hole

### RF Connectors Technical Data Sheet

**PE45953**

#### Configuration

- SMA Female Connector
- MIL-STD-348A
- 50 Ohms
- Straight Body Geometry

- Connector Interface Types: RG174, RG174NM
- Bulkhead
- Non-Magnetic Design

#### Features

- Max. Operating Frequency 6 GHz
- Good VSWR of 1.3:1

- Gold Plated Beryllium Copper Contact
- 50 µin minimum contact plating

#### Applications

- General Purpose Test
- Rack and Panel Mount Applications

- Custom Cable Assemblies
- Medical

- Quantum Computing
- Military and Aerospace

#### Description

Pasternack's PE45953, SMA, Non-Magnetic, Connector is part of our full line of RF components available for same-day shipping. Our SMA female connector operates up to a maximum frequency of 6 GHz and offers good VSWR of 1.3:1. 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. Pasternack's Non Magnetic connectors are manufactured with materials that are especially adapted to non magnetism. Our non-magnetic connectors have a susceptibility of around  $10^{-5}$ , as opposed to  $10^{-2}$  for standard connectors made of brass/nickel materials. As a result, our non-magnetic connectors are transparent to the magnetic field, which means no field distortion and a higher Signal-to-Noise Ratio (SNR).

Our SMA female bulkhead connector PE45953 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		6	GHz
VSWR			1.3:1	
Operating Voltage (AC)			335	Vrms
Impedance		50		Ohms

#### Mechanical Specifications

<b>Size</b>	
Length	0.70 in [17.70 mm]
Width	0.43 in [11.00 mm]
Height	0.43 in [11.00 mm]
Weight	0.02 lbs [8.16 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Non-Magnetic SMA Female Bulkhead Mount Connector, Crimp/Solder Attachment for RG174U .236 inch D Hole PE45953](#)



Non-Magnetic SMA Female Bulkhead Mount Connector,  
Crimp/Solder Attachment for RG174U .236 inch D Hole

## RF Connectors Technical Data Sheet

**PE45953**

### Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold 50 µin minimum
Insulation	Teflon	
Outer Conductor	Beryllium Copper	Gold 3 µin minimum
Body	Beryllium Copper	Gold 3 µin minimum
Coupling Nut	Beryllium Copper	Gold 3 µin minimum
Gasket	Silicone	
Crimp Sleeve	Brass	Gold 3 µin minimum
Washer	Beryllium Copper	Gold 3 µin minimum

### 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: [Non-Magnetic SMA Female Bulkhead Mount Connector, Crimp/Solder Attachment for RG174U .236 inch D Hole PE45953](#)



Non-Magnetic SMA Female Bulkhead Mount Connector,  
Crimp/Solder Attachment for RG174U .236 inch D Hole

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

**PE45953**

Non-Magnetic SMA Female Bulkhead Mount Connector, Crimp/Solder Attachment for RG174U .236 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.

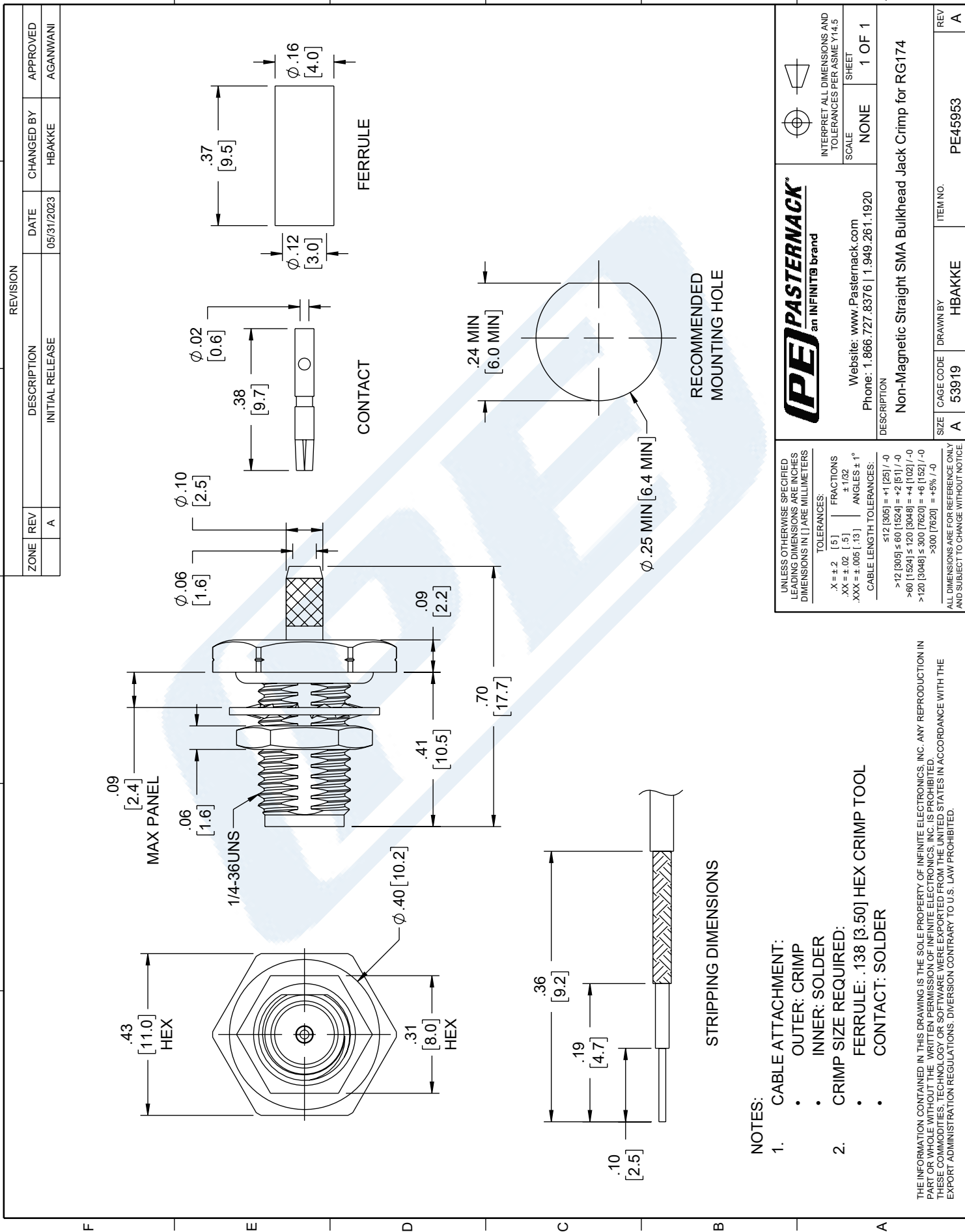
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Non-Magnetic SMA Female Bulkhead Mount Connector, Crimp/Solder Attachment for RG174U .236 inch D Hole PE45953](#)

URL: <https://www.pasternack.com/sma-female-rg316-ds-rg188-ds-connector-pe45953-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.

# PE45953 CAD Drawing

Non-Magnetic SMA Female Bulkhead Mount Connector, Crimp/  
Solder Attachment for RG174U .236 inch D Hole





MMCX Plug Connector Crimp/Solder Attachment for RG174,  
RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch

RF Connectors  
Technical Data Sheet

PE4896

**Configuration**

- MMCX Plug Connector
- BS EN 122340
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, .100 inch

**Features**

- Max. Operating Frequency 6 GHz
- Excellent VSWR of 1.22:1
- Gold Plated Brass Contact
- 30 µin minimum contact plating

**Applications**

- General Purpose Test
- Custom Cable Assemblies

**Description**

Pasternack's PE4896 MMCX plug connector with crimp/solder attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100 and .100 inch is part of our full line of RF components available for same-day shipping. Our MMCX plug connector operates up to a maximum frequency of 6 GHz and offers excellent VSWR of 1.22:1.

Our MMCX plug connector PE4896 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		6	GHz
VSWR			1.22:1	
Operating Voltage (AC)			250	Vrms

**Mechanical Specifications**

<b>Size</b>	
Length	0.575 in [14.61 mm]
Width/Dia.	0.177 in [4.50 mm]
Weight	0.007 lbs [3.18 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [MMCX Plug Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch PE4896](#)



MMCX Plug Connector Crimp/Solder Attachment for RG174,  
 RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch

## RF Connectors Technical Data Sheet

PE4896

### Material Specifications

Description	Material	Plating
Contact	Brass	Gold 30 µin minimum
Insulation	PTFE	
Outer Conductor	Brass	Gold 3 µin minimum
Body	Brass	Gold 3 µin minimum
Crimp Sleeve	Brass	Gold

### Environmental Specifications

#### Temperature

Operating Range -55 to +155 deg C

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

### Plotted and Other Data

Notes:

MMCX Plug Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch 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: [MMCX Plug Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch PE4896](#)

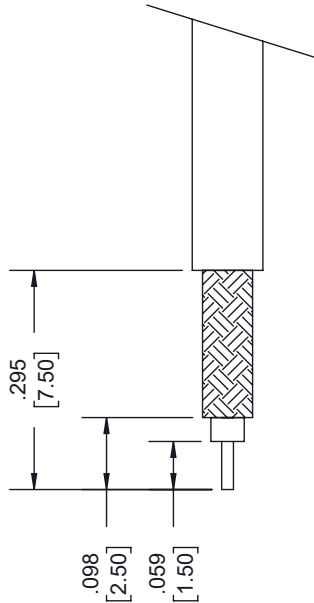
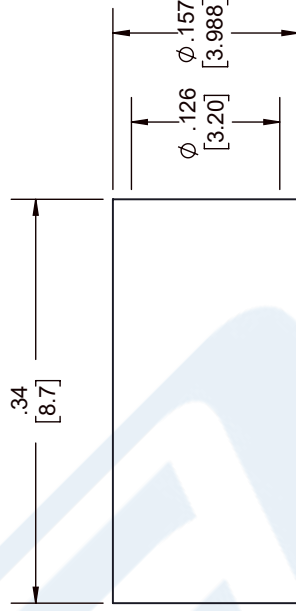
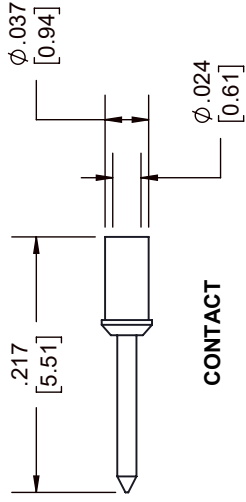
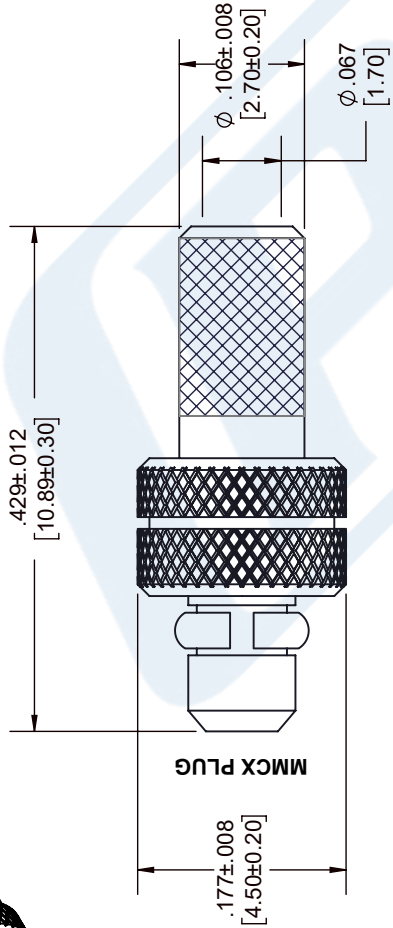
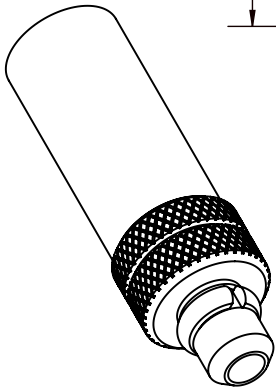
URL: <https://www.pasternack.com/mmcx-plug-rg174-rg316-rg188-lmr-100-pe-b100-pe-c100-0.100-connector-pe4896-p.aspx>

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# PE4896 CAD Drawing

MMCX Plug Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PCR PE4896	12/3/2020	S. ELLIS



**NOTES:**

- CABLE ATTACHMENT:**
  - OUTER: CRIMP.
  - INNER: CRIMP.
- CRIMP SIZE REQUIRED:**
  - FERRULE: .138 [3.50] HEX. CRIMP TOOL.
  - CONTACT: .026 [0.67] HEX. CRIMP TOOL.

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

**TOLERANCES:**

.X = ± .2 [ .008]    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% / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

**THIRD-ANGLE PROJECTION**

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SHEET 1 OF 1

SCALE N/A

REV A

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ITEM NO. PE4896

SIZE A    CAGE CODE 53919    DRAWN BY K.DANG

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# 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 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
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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



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