



## SMA Male Connector Crimp/Solder Attachment for LMR-100, PE-C100, RG174, RG188, RG316

### RF Connectors Technical Data Sheet

#### Times Microwave Systems Connector Specification

##### Configuration

- SMA Male Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: LMR-100, PE-C100, RG174, RG188, RG316

##### Features

- Max. Operating Frequency 6 GHz
- Gold Plated Brass Contact
- 15  $\mu$ m contact plating

##### Applications

- General Purpose Test
- Custom Cable Assemblies

##### Description

Pasternack's SC-100-SM, SMA, Standard, Connector 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 6 GHz.

Our SMA male connector SC-100-SM 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
Insertion Loss			0.25	dB
Operating Voltage (AC)			375	Vrms
Impedance		50		Ohms
Dielectric Withstanding Voltage (AC)			500	Vrms
Insulation Resistance	5,000			MOhms

##### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 3	3 to 5				GHz
VSWR, Max	1.2:1	1.3:1				

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 LMR-100, PE-C100, RG174, RG188, RG316 SC-100-SM](#)



SMA Male Connector Crimp/Solder Attachment for  
LMR-100, PE-C100, RG174, RG188, RG316

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

**Mechanical Specifications**

**Size**

Length	1.00 in [25.40 mm]
Width	0.32 in [8.00 mm]
Height	0.32 in [8.00 mm]
Weight	0.01 lbs [4.31 g]
Mating Cycles	500 Cycles
Mating Torque	7 to 10 in-lbs [0.79 to 1.13 Nm]
Cable Retention Force	20 lbs [9.07 kg]

**Material Specifications**

Description	Material	Plating
Contact	Brass	Gold 15 µin
Insulation	PTFE	
Body	Brass	Nickel 200 µin
Coupling Nut	Brass	Nickel 200 µin

**Environmental Specifications**

**Temperature**

Operating Range	-40 to +125 deg C
Shock	MIL-STD 202G, Meth. 213, Cond. I
Vibration	MIL-STD 202G, Meth. 204, Cond. D
Thermal Shock	MIL-STD 202G, Meth. 107, Cond. B

**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 Male Connector Crimp/Solder Attachment for LMR-100, PE-C100, RG174, RG188, RG316 SC-100-SM](#)



## SMA Male Connector Crimp/Solder Attachment for LMR-100, PE-C100, RG174, RG188, RG316

### RF Connectors Technical Data Sheet

SMA Male Connector Crimp/Solder Attachment for LMR-100, PE-C100, RG174, RG188, RG316 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.

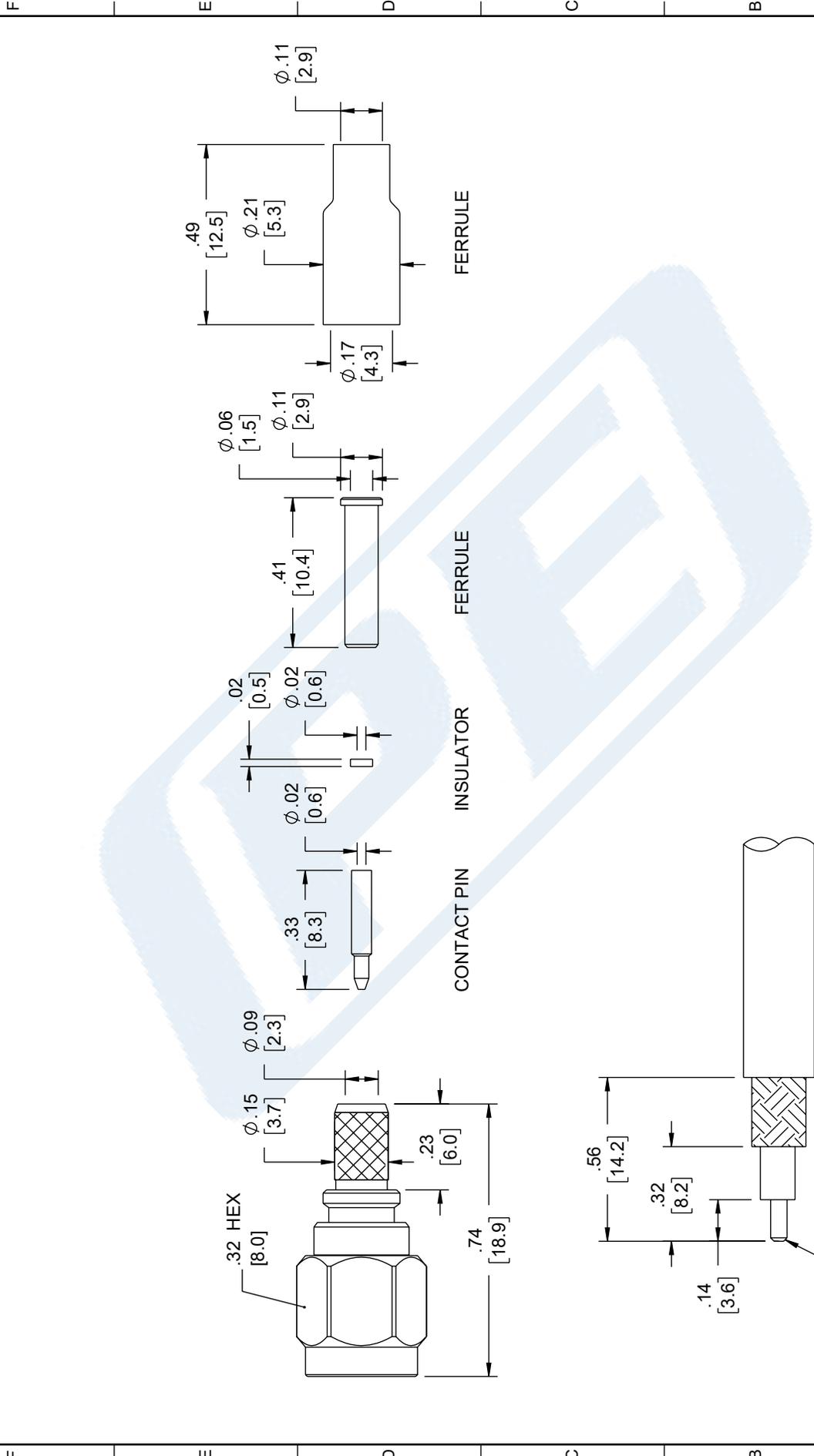
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Connector Crimp/Solder Attachment for LMR-100, PE-C100, RG174, RG188, RG316 SC-100-SM](https://www.pasternack.com/sma-male-lmr-100-pe-c100-rg174-rg188-rg316-connector-sc-100-sm)

URL: <https://www.pasternack.com/sma-male-lmr-100-pe-c100-rg188-rg316-connector-sc-100-sm-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.

**TIMES** MICROWAVE SYSTEMS **SC-100-SM CAD Drawing**  
 SMA Male Connector Crimp/Solder Attachment for LMR-100, PE-C100, RG174, RG188, RG316

ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	03/30/2023	HBAKKE	AGANWANI



**PE PASTERNAK**  
 an INFINITI® brand

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

TOLERANCES:  
 .X = ±.2 [5] | FRACTIONS ±1/32  
 .XX = ±.02 [ .5] | ANGLES ± 1°  
 .XXX = ±.005 [ .13] | CABLE LENGTH TOLERANCES:  
 ≤12 [305] = +1 [25] / -0  
 >12 [305] ≤ 60 [1524] = +2 [51] / -0  
 >60 [1524] ≤ 120 [3048] = +4 [102] / -0  
 >120 [3048] ≤ 300 [7620] = +6 [152] / -0  
 >300 [7620] = +5% / -0

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5  
 SCALE NONE SHEET 1 OF 1

Website: [www.Pasternack.com](http://www.Pasternack.com)  
 Phone: 1.866.727.8376 | 1.949.261.1920

DESCRIPTION  
 SMA Male Connector Crimp/Solder Attachment for LMR-100, PE-C100, RG174, RG188, RG316

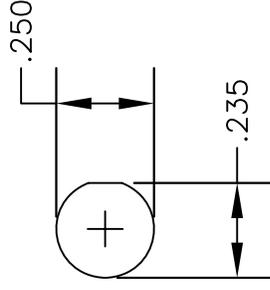
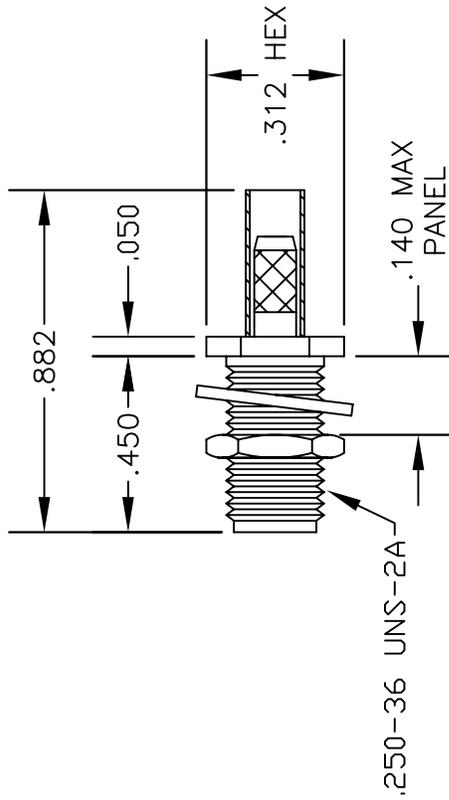
SIZE A CAGE CODE 53919 DRAWN BY HBAKKE ITEM NO. SC-100-SM REV A

**RECOMMENDED CABLE STRIPPING DIMENSIONS**

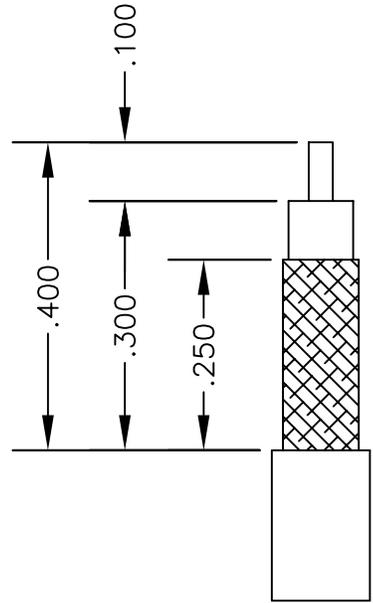
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

**MATERIALS**

BODY	BRASS NICKEL PLATED
CONTACT	GOLD PLATED
INSULATOR	PTFE
FERRULE	GOLD PLATED



MOUNTING HOLE



CONTACT: SOLDER  
FERRULE: SOLDER

STRIPPING DIMENSIONS



**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

**PE4188**

DES. SMA FEMALE, BULKHEAD, SOLDER ATTACHMENT FOR RG174, RG188 & RG316

SIZE A FSCM NO. 53919 CAD FILE 072403 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.

## 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
--------------------------------	-------------------

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.

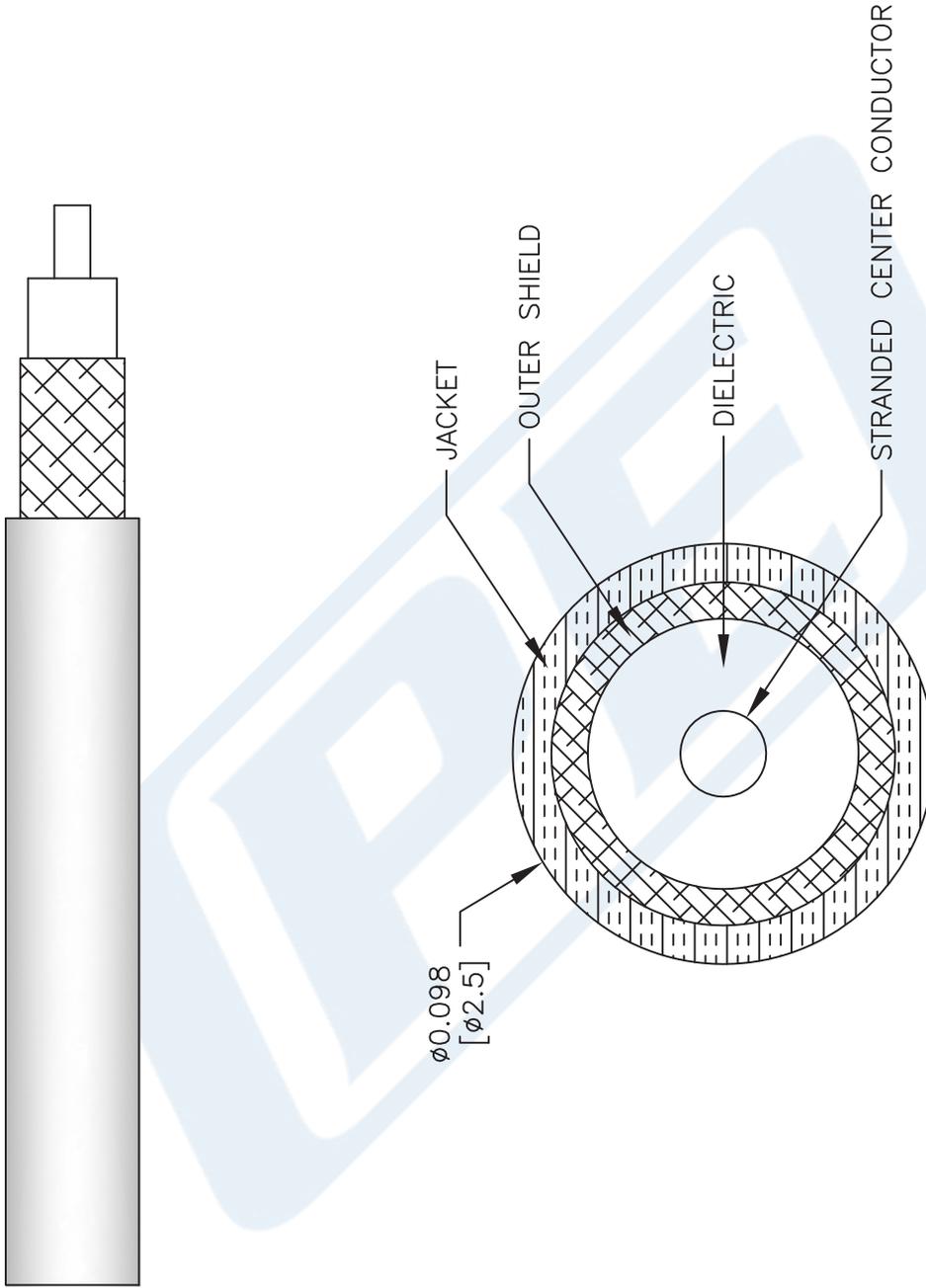
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG316 Coax Cable Single Shielded with Tan FEP Jacket RG316/U](#)

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)