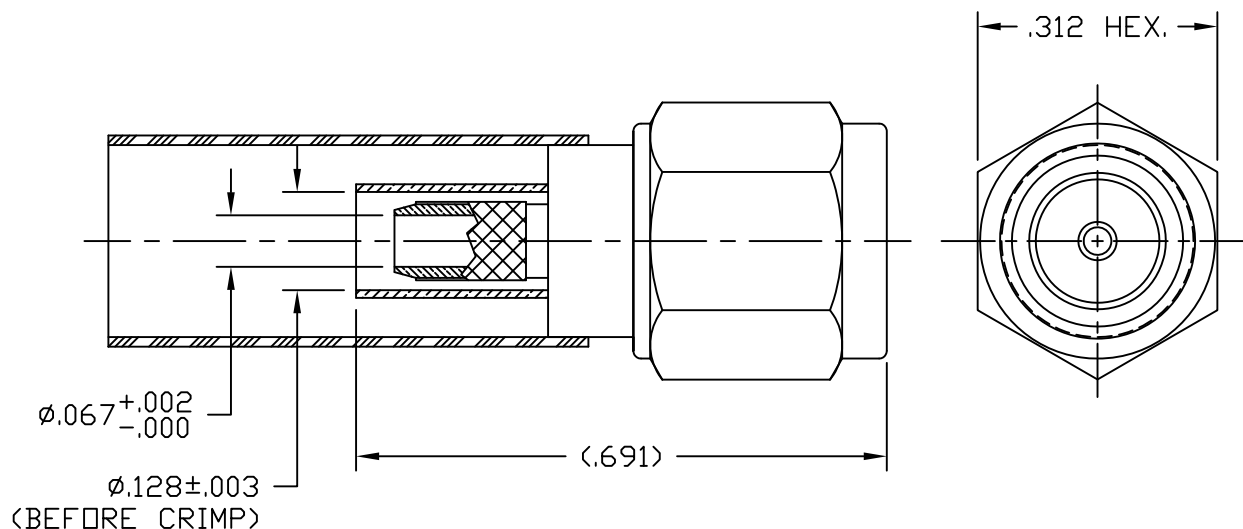


NOTICE OF PROPRIETARY RIGHTS THIS DOCUMENT CONTAINS CONFIDENTIAL TECHNICAL DATA, INCLUDING TRADE SECRETS, PROPRIETARY TO TIMES MICROWAVE SYSTEMS. DISCLOSURE OF THIS DATA IS EXPRESSLY CONDITIONED UPON YOUR ASSENT THAT ITS USE IS LIMITED TO USE WITHIN YOUR COMPANY ONLY. ANY OTHER USE IS STRICTLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF TIMES MICROWAVE SYSTEMS.

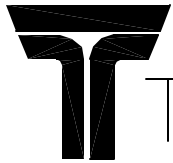
SYM	REVISION DESCRIPTION	DFTM	DATE	APPD	DATE
-	RELEASED FOR PRODUCTION	J. C. L.	8/20/03	J. C. L.	8/20/03
A	CHANGED PER CDC #36704	D. J. H.	1/14/13	J. D. B.	1/15/13
B	CHANGED PER CDC #37206	J. D. B.	3/226/13	J. D. B.	3/26/13



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.

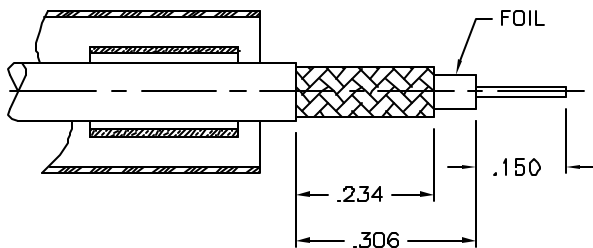
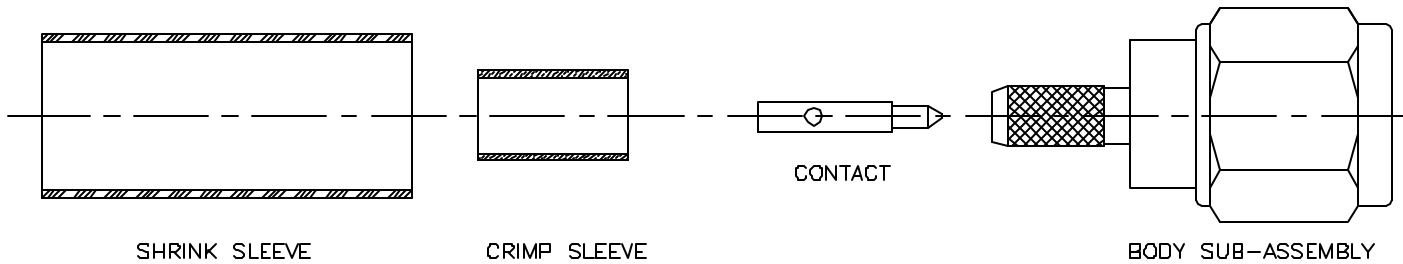
MATL:	UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES MACHINED SURFACES FINISH N/A RMS MAX. REMOVE ALL BURRS .005 MAX. BREAK MACHINE CORNERS .005 MAX. FILLET R. TOLERANCES ON DECIMALS .XX ± .03 .XXX ± .005 ANGLES ± 1° FRACTIONS ± 1/32	DFTM. J. C. L.	TIMES MICROWAVE SYSTEMS
USED ON: A		DATE 8/20/03	TC-100-SM SMA MALE FOR LMR100 CABLE
		CHKD. J. C. L.	
SCALE: N/A	DWG. SIZE A	DATE 8/20/03	SD3190-1551
		APPD. J. C. L.	
DO NOT SCALE DRAWING	CODE IDENT 68999	DATE 8/20/03	REV B



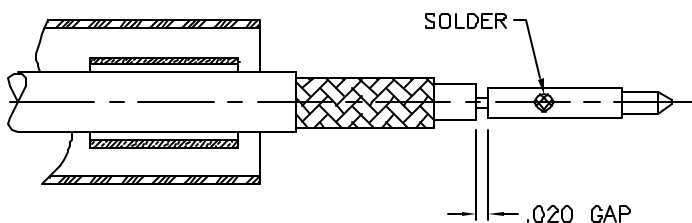
TIMES MICROWAVE SYSTEMS

358 Hall Avenue/P.O. Box 5039
Wallingford, CT 06492-5039
Tel: 203-949-8400
FAX: 203-949-8423
1-800-TMS-COAX
www.timesmicrowave.com

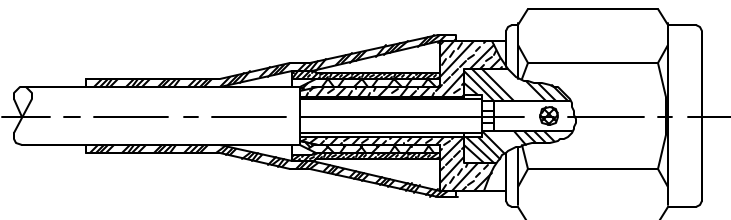
INSTALLATION INSTRUCTIONS TC-100-SM (TIMES 3190-1551) (Cable Types: LMR-100)



- 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 Male Right Angle Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch

RF Connectors Technical Data Sheet

PE4009

Configuration

- SMA Male Connector
- MIL-STD-348A
- 50 Ohms
- Right Angle Body Geometry
- RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch Interface Type
- Crimp/Solder Attachment
- 5/16 inch Hex

Features

- Max. Operating Frequency 3 GHz
- Good VSWR of 1.4:1
- Gold Plated Brass Contact
- 50 μ m minimum contact plating

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

Pasternack's PE4009 SMA male right angle connector with crimp/solder attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100 and 0.100 inch 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 3 GHz and offers good VSWR of 1.4:1. Its right angle body geometry allows for easier connections in tight spaces.

Our SMA male right angle connector PE4009 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		3	GHz
VSWR			1.4:1	
Operating Voltage (AC)			335	Vrms

Mechanical Specifications

Size

Length	0.756 in [19.2 mm]
Width/Dia.	0.315 in [8.00 mm]
Height	0.61 in [15.49 mm]
Weight	0.013 lbs [5.9 g]
Mating Torque	3 to 5 in-lbs [0.34 to 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 RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch PE4009](#)



SMA Male Right Angle Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch

RF Connectors Technical Data Sheet

PE4009

Material Specifications

Description	Material	Plating
Contact	Brass	Gold 50 µin minimum
Insulation	PTFE	
Body	Brass	Nickel 100 µin minimum
Coupling Nut	Brass	Nickel 100 µin minimum
Crimp Sleeve	Brass	Nickel

Environmental Specifications

Temperature

Operating Range -65 to +165 deg C

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

Plotted and Other Data

Notes:

SMA Male Right Angle 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% availability and are part of the broadest selection in the industry.

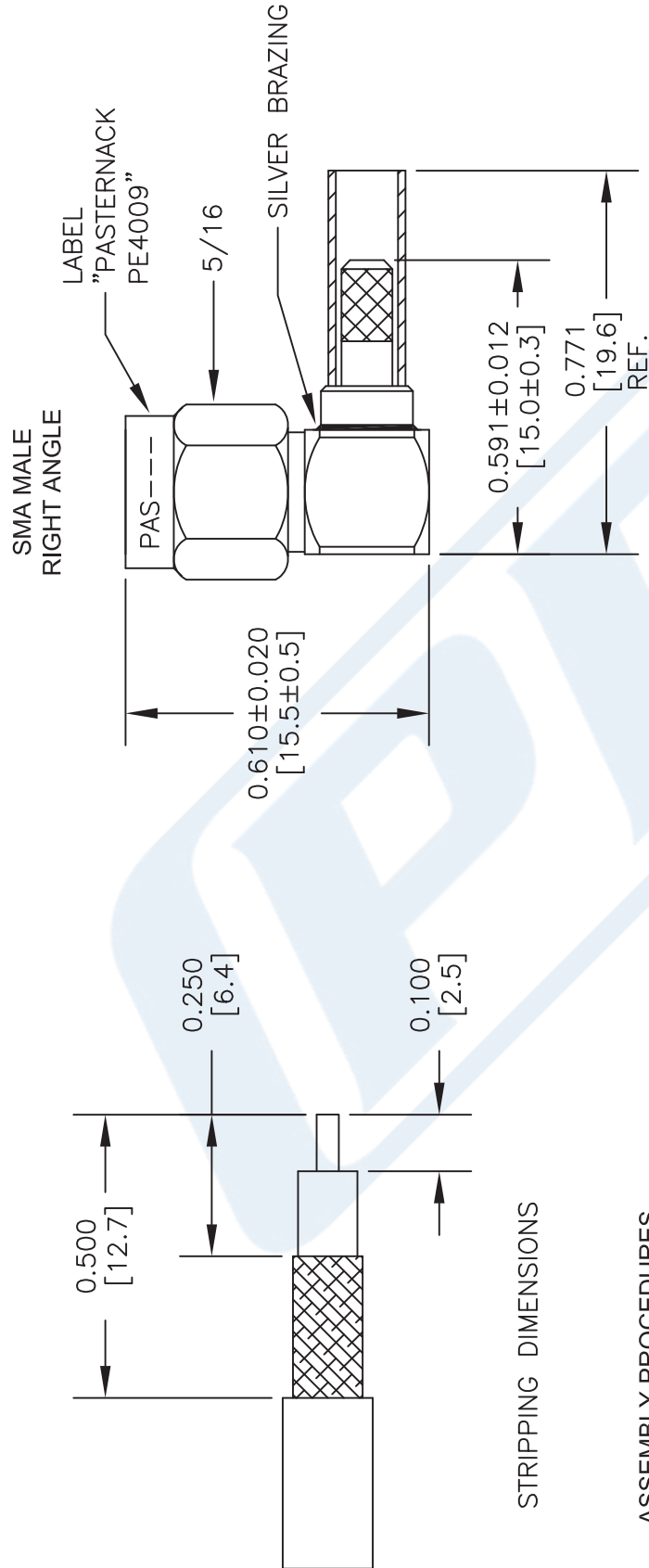
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Right Angle Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch PE4009](#)

URL: <https://www.pasternack.com/sma-male-standard-rg316-rg174-rg188-connector-pe4009-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.

PE4009 CAD Drawing

SMA Male Right Angle Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch



STRIPPING DIMENSIONS

ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN & SLIDE FERRULE OVER CABLE.
2. INSTALL CABLE INTO BODY OF CONNECTOR AND SOLDER CENTER CONDUCTOR IN PLACE.
3. CRIMP FERRULE & PRESS CAP DOWN.

CRIMP SIZE REQUIRED

FERRULE: .128" HEX CRIMP TOOL

STANDARD TOLERANCES

.X	±0.2
.XX	±0.1
.XXX	±0.05

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

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

PE4009

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 | E-Mail: sales@pasternack.com

FSCM NO. 53919

CAD FILE 071316

SCALE N/A

SIZE A

2233

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		29.4 [96.46]		pF/ft [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, Silver, 7 Strands	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	
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.

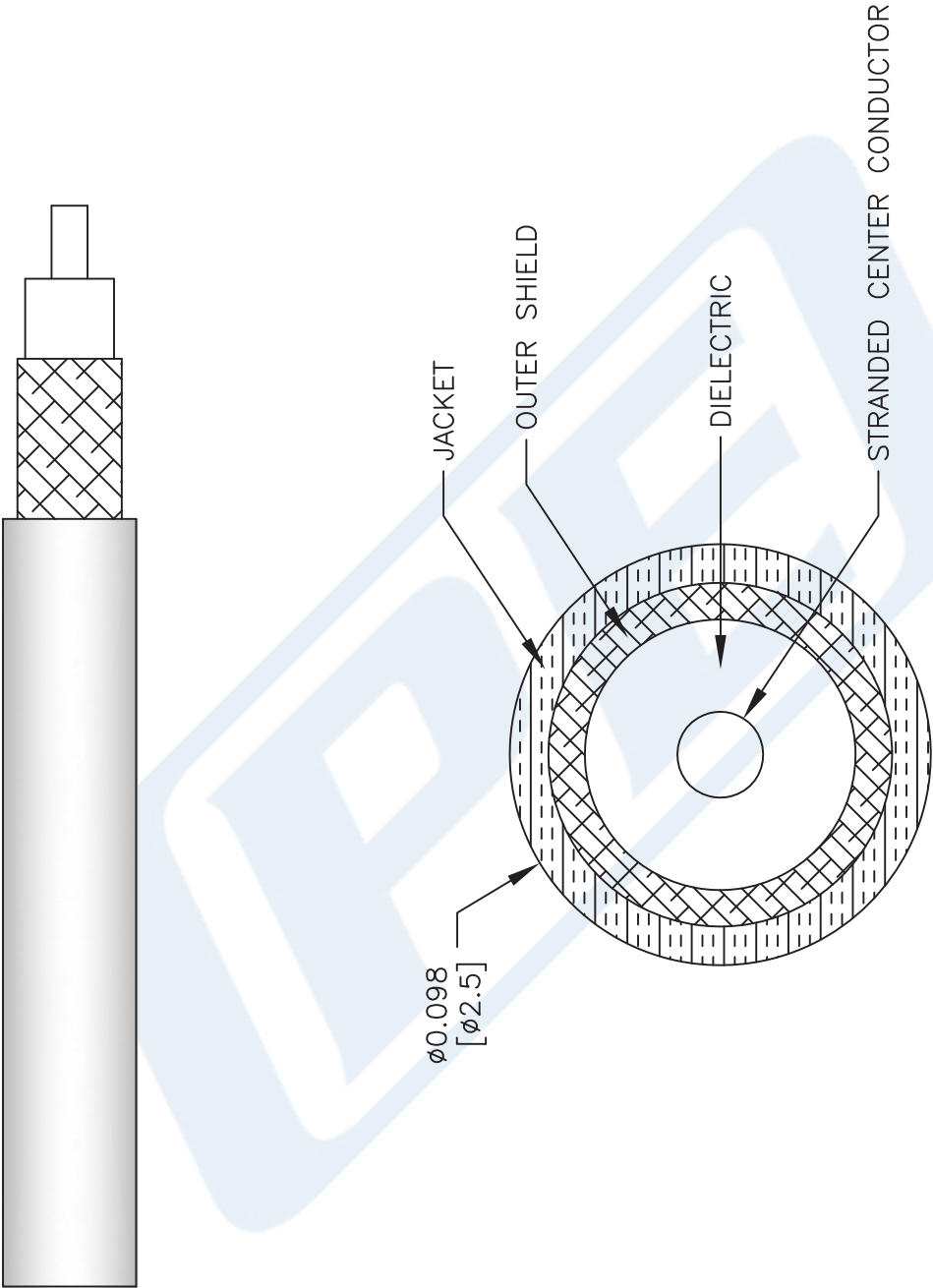
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG316 Coax Cable Single Shielded with Tan FEP Jacket RG316/U](#)

URL: <https://www.pasternack.com/50-ohm-flexible-rg316u-fep-jacket-silver-plated-copper-braid-outer-conductor-single-shielded-tan-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:
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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

41742

SIZE A

SCALE N/A

111716

CAD FILE