



## SSMC Plug Connector Crimp/Solder Attachment for RG316, RG174, RG188

### RF Connectors Technical Data Sheet

PE45209

#### Configuration

- SSMC Plug Connector
- 50 Ohms
- Straight Body Geometry
- RG316, RG174, RG188 Interface Type
- Crimp/Solder Attachment
- 5/32 inch Hex

#### Features

- Max. Operating Frequency 12.4 GHz
- Good VSWR of 1.5:1
- Gold Plated Beryllium Copper Contact

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE45209 SSMC plug 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 SSMC plug connector operates up to a maximum frequency of 12.4 GHz and offers good VSWR of 1.5:1.

Our SSMC plug connector PE45209 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			1.5:1	
Insulation Resistance	1,000			MOhms

#### Mechanical Specifications

##### Size

Length	0.94 in [23.88 mm]
Width/Dia.	0.156 in [3.96 mm]
Weight	0.006 lbs [2.72 g]
Mating Cycles	500 Cycles
Mating Torque	1 in-lbs [0.11 Nm]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SSMC Plug Connector Crimp/Solder Attachment for RG316, RG174, RG188 PE45209](#)



SSMC Plug Connector Crimp/Solder  
Attachment for RG316, RG174, RG188

RF Connectors Technical Data Sheet

PE45209

**Material Specifications**

Description	Material	Plating
Contact	Beryllium Copper	Gold
Insulation	PTFE	
Body	Beryllium Copper	Gold
Coupling Nut	Beryllium Copper	Gold

**Environmental Specifications**

**Temperature**

Operating Range -45 to +120 deg C

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

**Plotted and Other Data**

Notes:

**Assembly Instruction**

SSMC Plug 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.

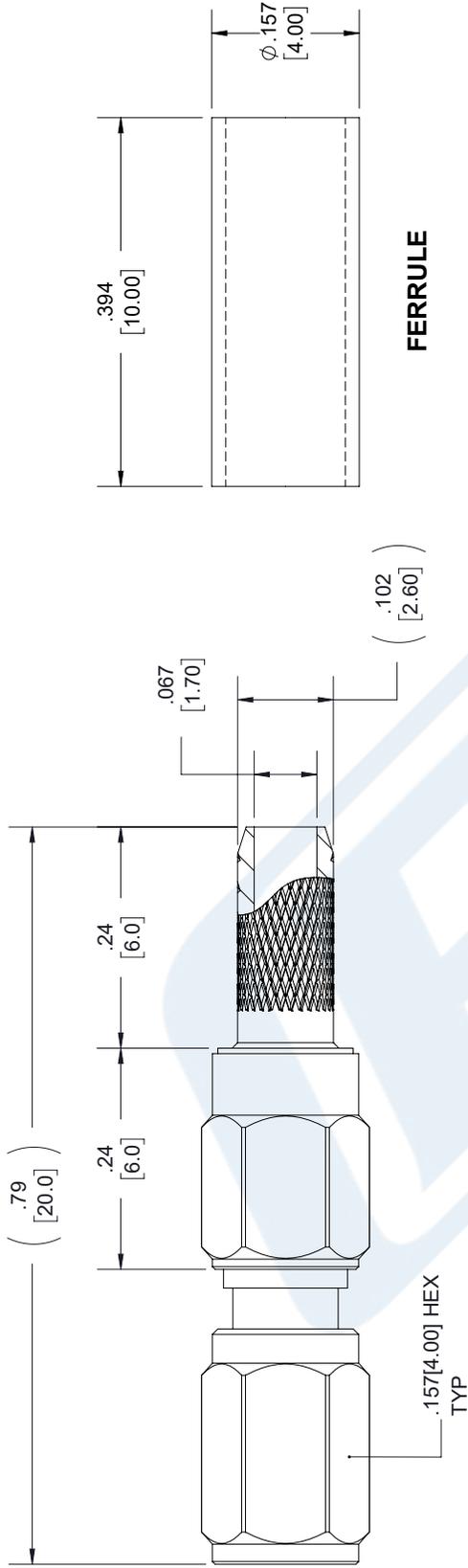
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SSMC Plug Connector Crimp/Solder Attachment for RG316, RG174, RG188 PE45209](#)

URL: <https://www.pasternack.com/ssmc-male-rg316-rg174-rg188-connector-pe45209-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.

# PE45209 CAD Drawing

SSMC Plug Connector Crimp/Solder Attachment for RG316, RG174, RG188



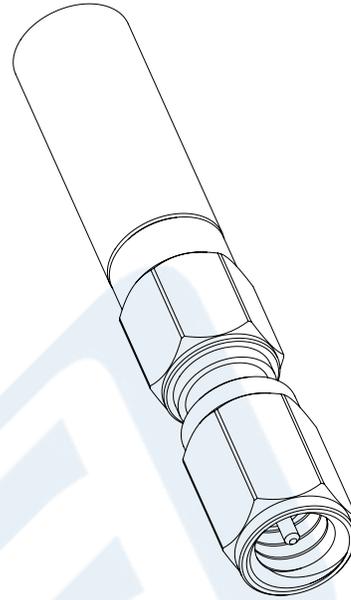
## FERRULE

## CENTER CONTACT

### STANDARD TOLERANCES

.X ±0.2  
.XX ±0.01  
.XXX ±0.005

\*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  
**PE45209**

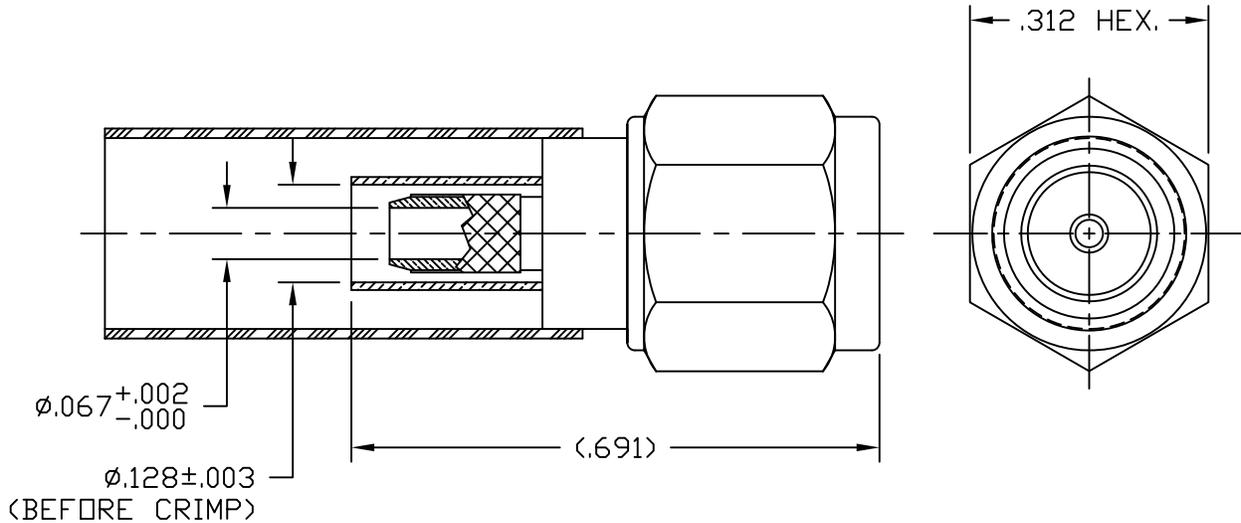
**PE PASTERNAK®**  
THE ENGINEER'S RF SOURCE  
Pasternack Enterprises, Inc.  
P.O. Box 16759 | Irvine | CA | 92623  
Phone: (949) 261-1920 | Fax: (949) 261-7451  
Website: www.pasternack.com | E-Mail: sales@pasternack.com

CAGE CODE **53919**

CAD FILE 022318  
SCALE N/A  
SIZE A  
7361

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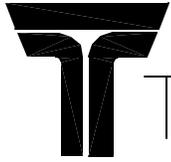
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-	RELEASED FOR PRODUCTION	J. C. L.	8/20/03	J. C. L.	8/20/03
A	CHANGED PER CDC #36704	D. J. H.	1/14/13	J. D. B.	1/15/13
B	CHANGED PER CDC #37206	J. D. B.	3/226/13	J. D. B.	3/26/13



**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.

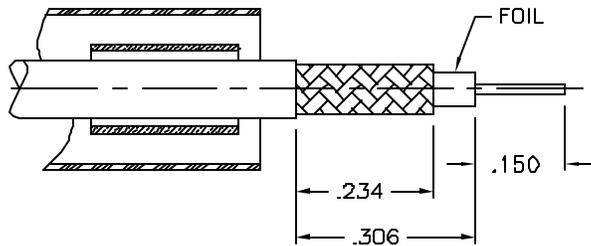
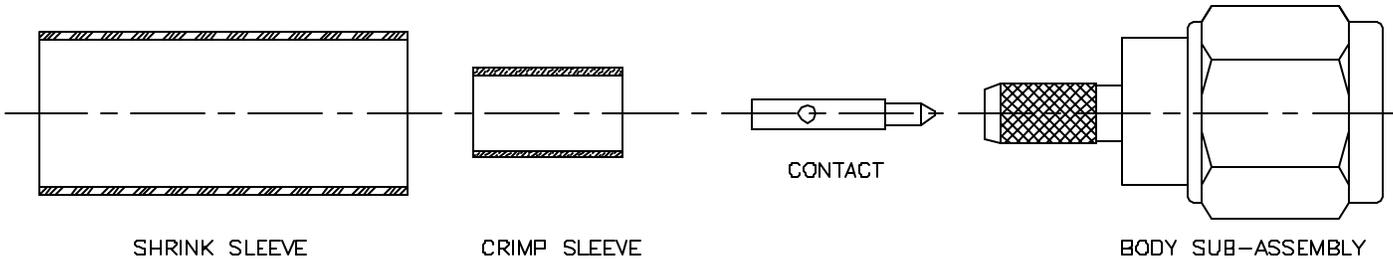
MATERIAL:	UNLESS OTHERWISE SPECIFIED		DFTM. J. C. L.	TIMES MICROWAVE SYSTEMS	
	ALL DIMENSIONS ARE IN INCHES MACHINED SURFACES FINISH N/A RMS MAX. REMOVE ALL BURRS .005 MAX. BREAK MACHINE CORNERS .005 MAX. FILLET R. TOLERANCES ON DECIMALS . XX ± .03 . XXX ± .005 ANGLES ± 1° FRACTIONS ± 1/32		DATE 8/20/03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



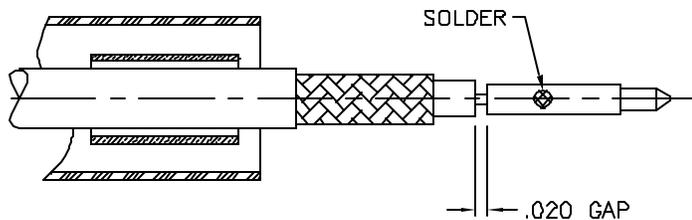
# TIMES MICROWAVE SYSTEMS

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

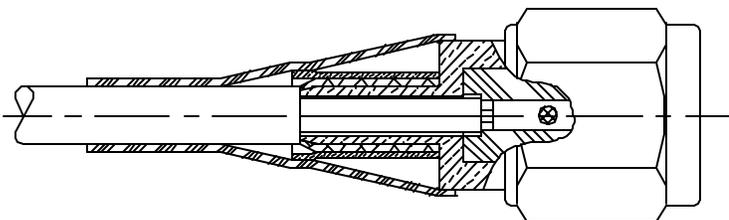
## INSTALLATION INSTRUCTIONS TC-100-SM (TIMES 3190-1551) (Cable Types: LMR-100)



- 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.

## 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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## 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.

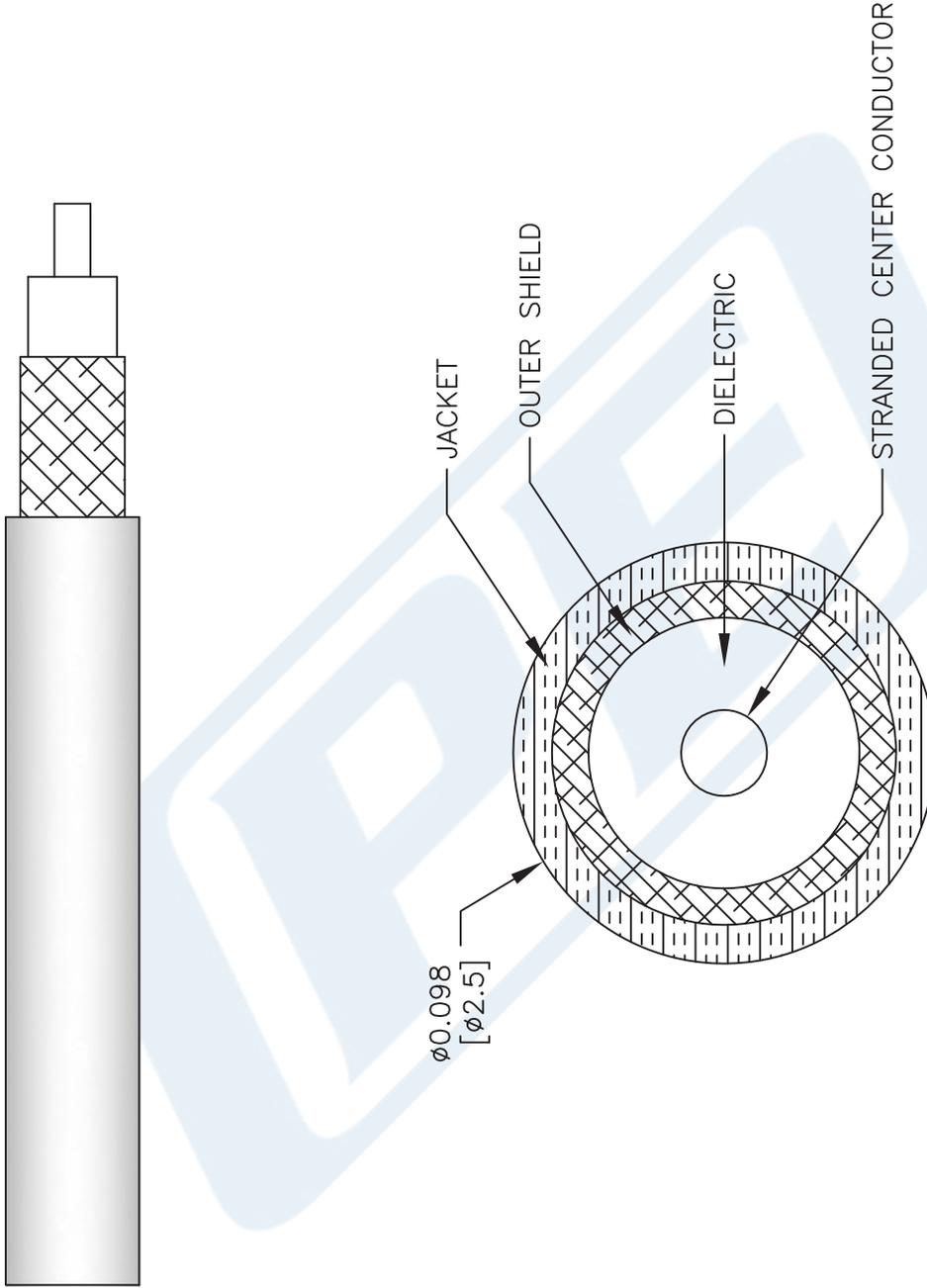
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG316 Coax Cable Single Shielded with Tan FEP Jacket RG316/U](#)

URL: <https://www.pasternack.com/50-ohm-flexible-rg316u-fep-jacket-silver-plated-copper-braid-outer-conductor-single-shielded-tan-rg316-u-p.aspx>

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# RG316/U CAD Drawing

Flexible RG316 Coax Cable Single Shielded with Tan FEP Jacket



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DWG TITLE

**RG316/U**

FSCM NO. 53919

CAD FILE

111716

SCALE N/A

SIZE A

41742



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