

FAKRA Jack Connector Crimp/Solder Attachment
 for RG174, RG316, RG188, .100 inch, PE-
 B100, PE-C100, LMR-100, Black Color



RF Connectors Technical Data Sheet

PE44646A

Configuration

- FAKRA Jack Connector
- 50 Ohms
- Straight Body Geometry
- RG174, RG316, RG188, .100 inch, PE-B100, PE-C100, LMR-100 Interface Type
- Crimp/Solder Attachment

Features

- Max. Operating Frequency 4 GHz
- Good VSWR of 1.3:1
- Gold Plated Phosphor Bronze Contact

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

Pasternack's PE44646A FAKRA jack connector with crimp/solder attachment for RG174, RG316, RG188, .100 inch, PE-B100, PE-C100 and LMR-100 is part of our full line of RF components available for same-day shipping. Our FAKRA jack connector operates up to a maximum frequency of 4 GHz and offers good VSWR of 1.3:1.

Our FAKRA jack connector PE44646A 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 | | 4 | GHz |
| VSWR | | | 1.3:1 | |
| Operating Voltage (AC) | | | 335 | Vrms |
| Dielectric Withstanding Voltage (AC) | | | 1,000 | Vrms |
| Inner Conductor DC Resistance | | | 6 | mOhms |
| Outer Conductor DC Resistance | | | 2.5 | mOhms |
| Insulation Resistance | 1,000 | | | MOhms |

Mechanical Specifications

Size

| | |
|------------|--------------------|
| Length | 0.038 in [0.97 mm] |
| Width/Dia. | 0.37 in [9.40 mm] |
| Height | 0.54 in [13.72 mm] |
| Weight | 0.008 lbs [3.63 g] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [FAKRA Jack Connector Crimp/Solder Attachment for RG174, RG316, RG188, .100 inch, PE-B100, PE-C100, LMR-100, Black Color PE44646A](#)

FAKRA Jack Connector Crimp/Solder Attachment
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RF Connectors Technical Data Sheet

PE44646A

Material Specifications

| Description | Material | Plating |
|-----------------|-----------------|---------|
| Contact | Phosphor Bronze | Gold |
| Insulation | PTFE | |
| Outer Conductor | Brass | Nickel |
| Body | Plastic | |

Environmental Specifications

Temperature

Operating Range

-40 to +85 deg C

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

Plotted and Other Data

Notes:

FAKRA Jack Connector Crimp/Solder Attachment for RG174, RG316, RG188, .100 inch, PE-B100, PE-C100, LMR-100, Black Color 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.

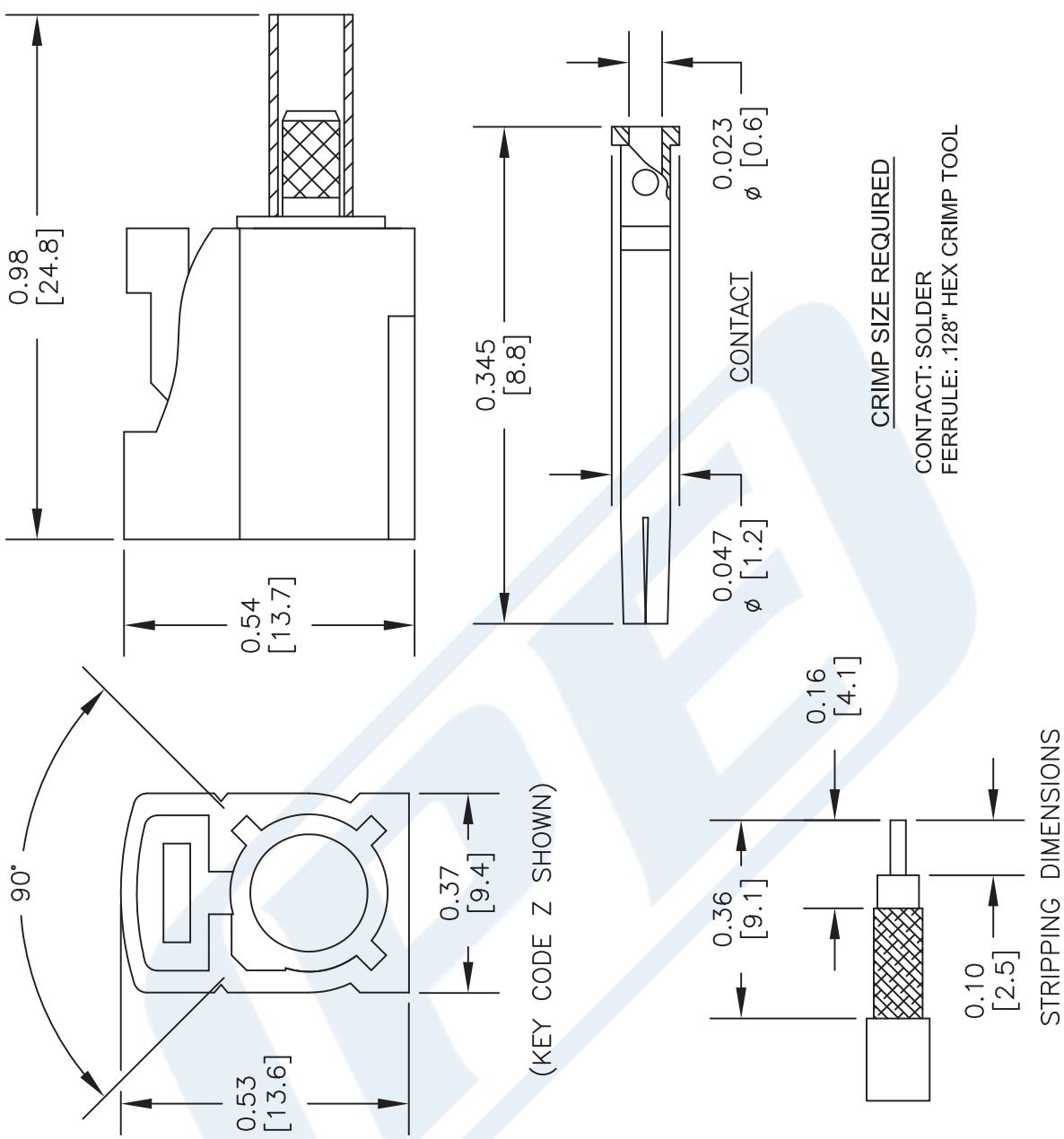
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URL: <https://www.pasternack.com/fakra-jack-standard-pe-c100-rg174-rg316-connector-pe44646a-p.aspx>

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.

PE44646A CAD Drawing

FAKRA Jack Connector Crimp/Solder Attachment for RG174, RG316, RG188, .100 inch, PE-B100, PE-C100, LMR-100, Black Color



Part Configurator

1. Replace Y with code.

| CODING | JACK | COLOR | APPLICATION |
|--------|------|------------|--|
| A | | BLACK | RADIO WITH PHANTOM SUPPLY |
| B | | WHITE | RADIO WITHOUT PHANTOM SUPPLY |
| C | | BLUE | GPS; TELEMATICS OR NAVIGATION |
| D | | BORDEAUX | GSM; CELLULAR PHONE |
| H | | VIOLET | GPS; TELEMATICS AND NAVIGATION |
| I | | BEIGE | BLUETOOTH |
| K | | CURRY | RADIO WITH IF OUTPUT (ANTENNA DIVERSITY) |
| Z | | WATER BLUE | NEUTRAL CODING |

PASTERNAK
THE ENGINEER'S RF SOURCE

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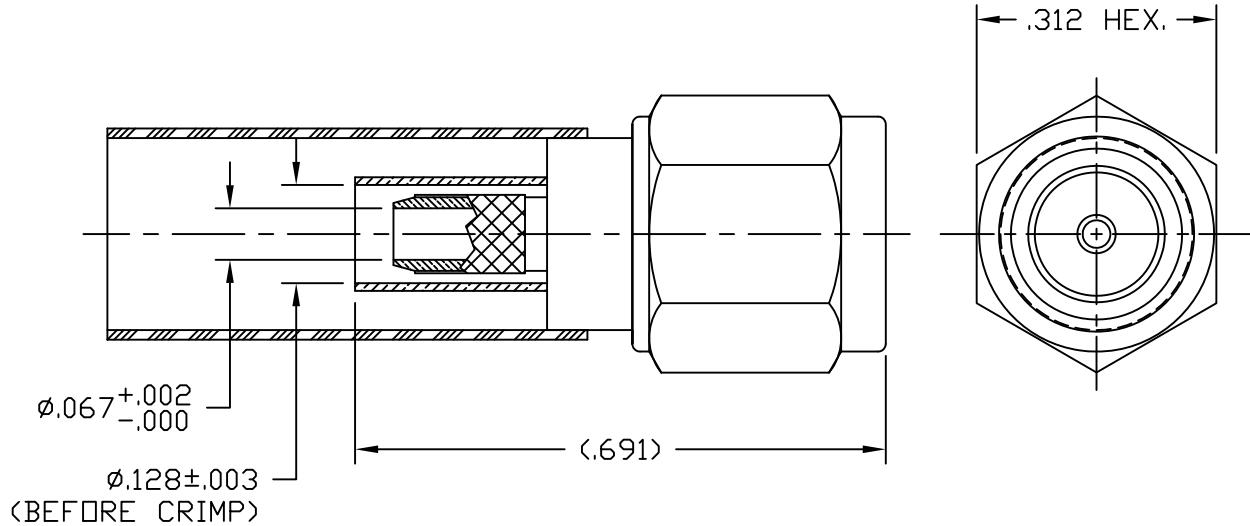
DWG TITLE
PE44646/Y

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].

CAGE CODE 53919 CAD FILE 041017 SCALE N/A SIZE A 2233

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| 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 | J. 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:

1. ASSEMBLED CONNECTOR INTERFACE IS DESIGNED IN ACCORDANCE WITH MIL-STD-348.
2. 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
3. FINISHES: BODY & HEX COUPLING NUT - PASSIVATE PER QQ-P-35
CONTACT - GOLD PLATE PER MIL-G-45204
FERRULE - SULFAMATE NICKEL PLATE
4. CONTACT PIN IS SOLDERED.
5. CRIMP THE FERRULE TO .128" HEX.

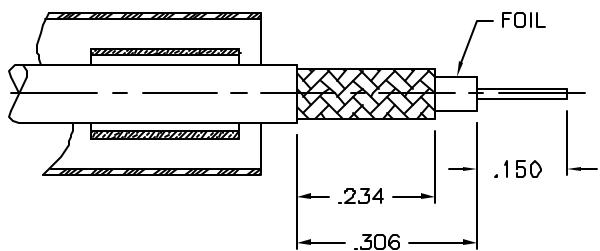
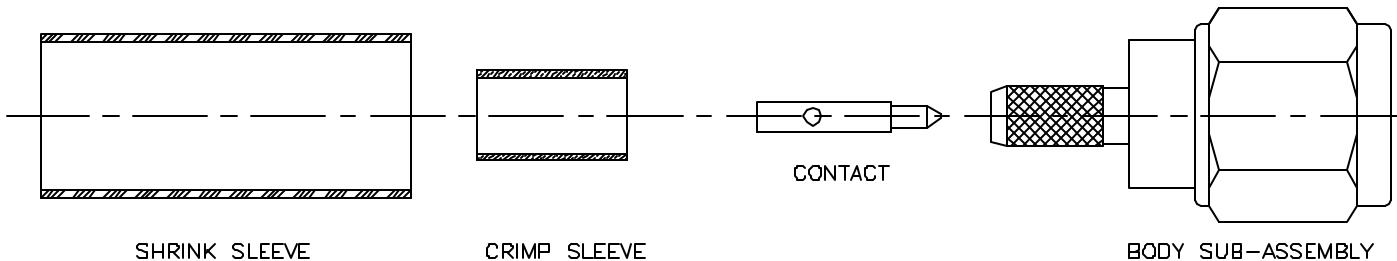
| | | | | | |
|------------|---|----------------------|------------------|----------------|------------------------------|
| MATERIAL | UNLESS OTHERWISE SPECIFIED | | DFTM, J. C. L. | DATE 8/20/03 | TIME'S MICROWAVE SYSTEMS |
| | ALL DIMENSIONS ARE IN INCHES MACHINED SURFACES FINISH N/A RMS MAX. REMOVE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



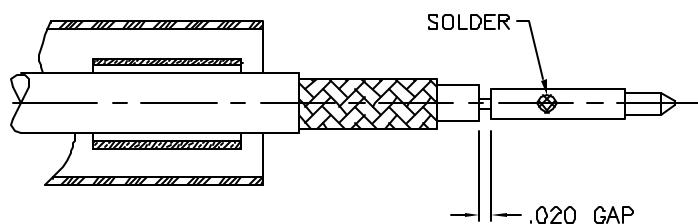
MICROWAVE SYSTEMS

358 Hall Avenue/P.O. Box 5039
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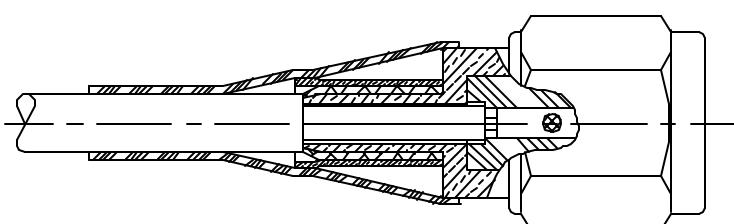
INSTALLATION INSTRUCTIONS
TC-100-SM (TIMES 3190-1551)
(Cable Types: LMR-100)



- 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 | • Wireless Systems | • High Flexibility Applications |
| • Antenna Feeds | • Indoor / Outdoor Uses | • Jumper Cable Assemblies |
| • Communication Systems | • High Temperature Applications | |

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 24.61 | 11 36.09 | 21 68.9 | 38 124.67 | 58 190.29 | dB/100ft 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.

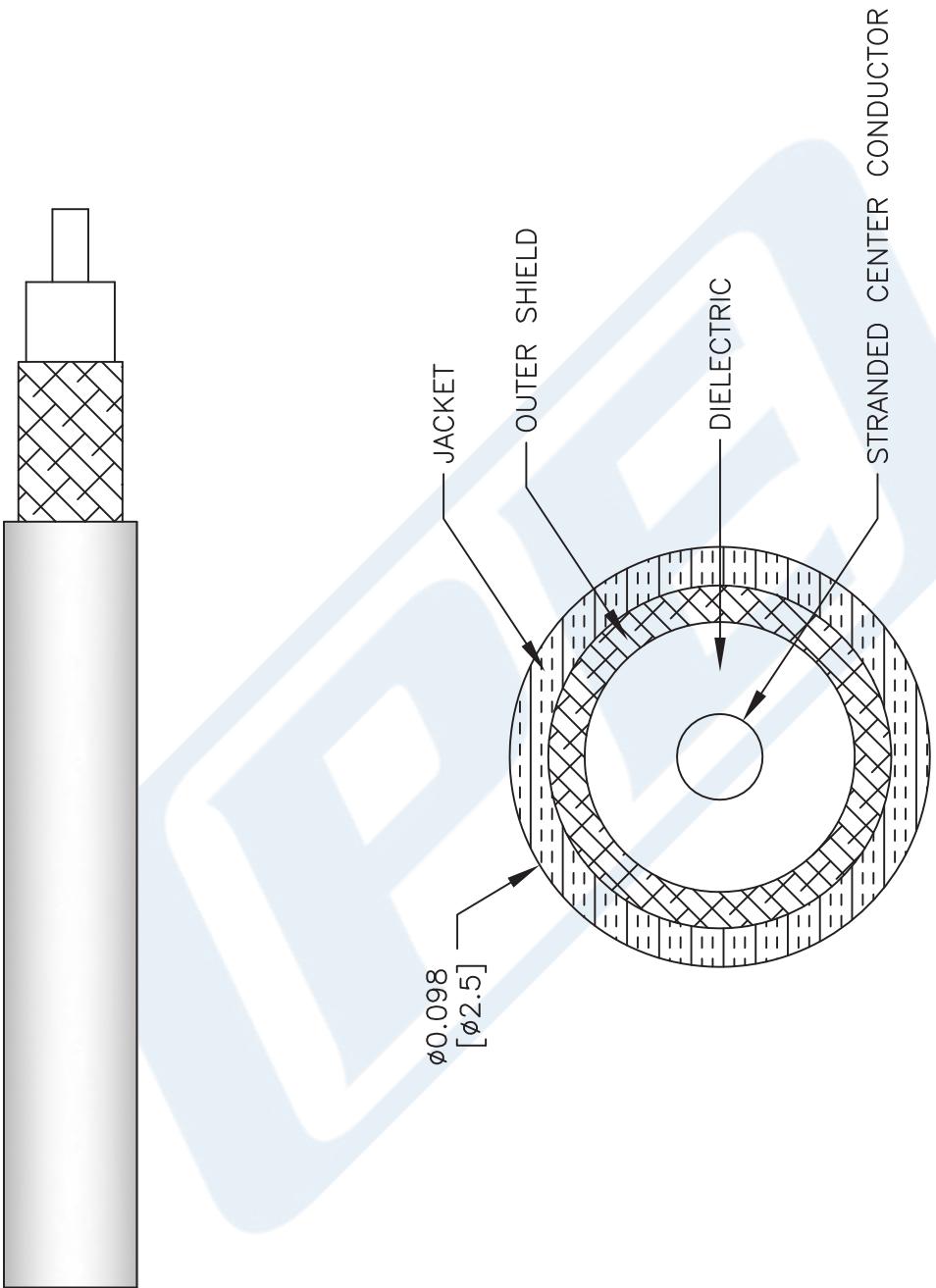
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URL: <https://www.pasternack.com/flexible-rg316u-fep-jacket-silver-plated-copper-braid-outer-conductor-single-shielded-rg316-u-p.aspx>

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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

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| FSCM NO. | 53919 | CAD FILE | 111716 | SCALE | N/A | SIZE | A |
|----------|-------|----------|--------|-------|-----|------|-------|
| | | | | | | | 41742 |