



3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402

## RF Connectors Technical Data Sheet

**PE4981**

### Configuration

- 3.5mm Male Connector
- 50 Ohms
- Straight Body Geometry
- PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402 Interface Type
- Clamp/Solder Attachment
- 5/16 inch Hex

### Features

- Max. Operating Frequency 34 GHz
- Excellent VSWR of 1.2:1
- Gold over Nickel Plated Beryllium Copper Contact
- 50 µin minimum contact plating

### Applications

- General Purpose Test
- Custom Cable Assemblies

### Description

Pasternack's PE4981 3.5mm male connector with clamp/solder attachment for PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN and RG402 is part of our full line of RF components available for same-day shipping. Our 3.5mm male connector operates up to a maximum frequency of 34 GHz and offers excellent VSWR of 1.2:1.

Our 3.5mm male connector PE4981 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      |         | 34      | GHz   |
| VSWR                                   |         |         | 1.2:1   |       |
| Insertion Loss                         |         |         | 0.233   | dB    |
| Operating Voltage (AC)                 |         |         | 500     | Vrms  |
| Dielectric Withstanding Voltage (AC)   |         |         | 1,500   | Vrms  |
| High Potential Voltage<br>5 to 7.5 MHz |         |         | 1,000   | Vrms  |
| Corona Discharge<br>@ 70000 ft         |         |         | 375     | Vrms  |
| Insulation Resistance                  | 5,000   |         |         | MOhms |
| RF Leakage                             | -90     |         |         | dB    |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR-402FLJ, PE-SR402TN, RG402 PE4981](#)



3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402

## RF Connectors Technical Data Sheet

**PE4981**

### Performance by Frequency

| Description     | F1         | F2           | F3         | F4 | F5 | Units |
|-----------------|------------|--------------|------------|----|----|-------|
| Frequency Range | DC to 12.4 | 12.4 to 26.5 | 26.5 to 34 |    |    | GHz   |
| VSWR, Max       | 1.1:1      | 1.14:1       | 1.2:1      |    |    |       |

Electrical Specification Notes:  
Insertion Loss is  $0.04 \cdot \sqrt{F(\text{GHz})}$  dB

### Mechanical Specifications

|               |                                  |
|---------------|----------------------------------|
| <b>Size</b>   |                                  |
| Length        | 0.86 in [21.84 mm]               |
| Width/Dia.    | 0.32 in [8.13 mm]                |
| Weight        | 0.012 lbs [5.44 g]               |
| Mating Cycles | 500 Cycles                       |
| Mating Torque | 8 to 10 in-lbs [0.90 to 1.13 Nm] |

### Material Specifications

| Description  | Material                   | Plating                            |
|--------------|----------------------------|------------------------------------|
| Contact      | Beryllium Copper           | Gold over Nickel<br>50 µin minimum |
| Insulation   | PCTFE                      |                                    |
| Body         | Passivated Stainless Steel | SAE-AMS-2700                       |
| Coupling Nut | Passivated Stainless Steel | SAE-AMS-2700                       |
| Gasket       | Silicone Rubber            |                                    |

### Environmental Specifications

|                    |                                         |
|--------------------|-----------------------------------------|
| <b>Temperature</b> |                                         |
| Operating Range    | -65 to +150 deg C                       |
| Humidity           | MIL-STD-202, METHOD 106, (NO VIBRATION) |
| Shock              | MIL-STD-202, METHOD 213, CONDITION I    |
| Vibration          | MIL-STD-202, METHOD 204, CONDITION D    |
| Thermal Shock      | MIL-STD-202, METHOD 107, CONDITION B    |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR-402FLJ, PE-SR402TN, RG402 PE4981](#)



3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402

## RF Connectors Technical Data Sheet

**PE4981**

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

### Plotted and Other Data

Notes:

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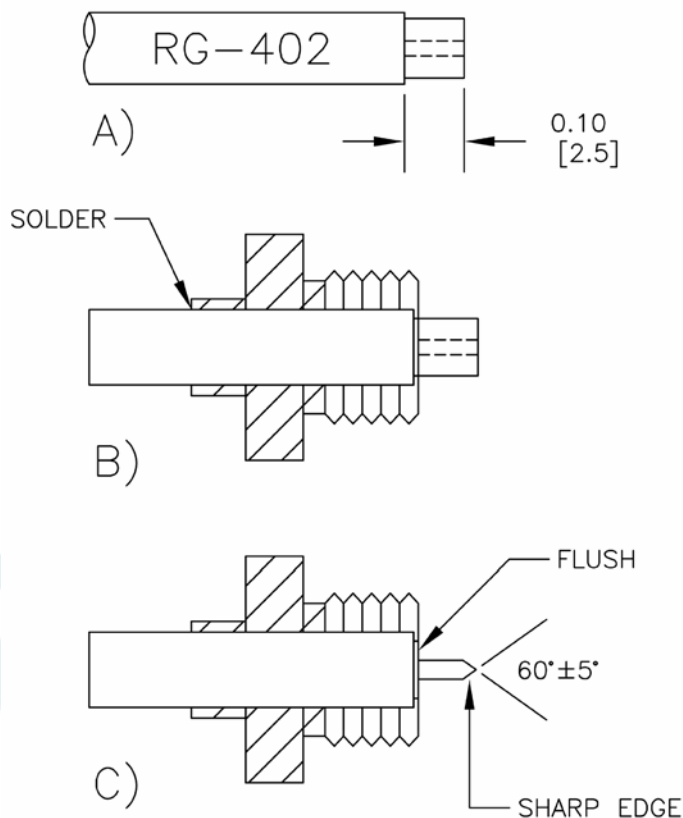
3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402



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

**PE4981**

**Assembly Instruction**



**ASSEMBLY PROCEDURES**

1. STRIP CABLE AS SHOWN IN (A). DO NOT NICK CENTER DIELECTRIC.
2. INSERT CABLE THROUGH CLAMP NUT AS SHOWN IN (B). SOLDER OUTER CONDUCTOR TO CLAMP NUT.
3. TRIM DIELECTRIC AND POINT CENTER CONDUCTOR AS SHOWN IN (C).
4. INSERT CABLE SUB-ASSEMBLY INTO CONNECTOR UNTIL SEATED AND TORQUE TO 25-30 IN-LBS.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR-402FLJ, PE-SR402TN, RG402 PE4981](#)



3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402

## RF Connectors Technical Data Sheet

**PE4981**

3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402 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.

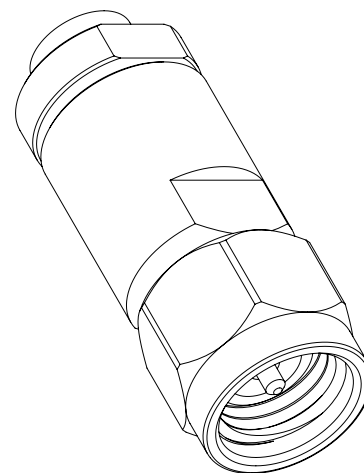
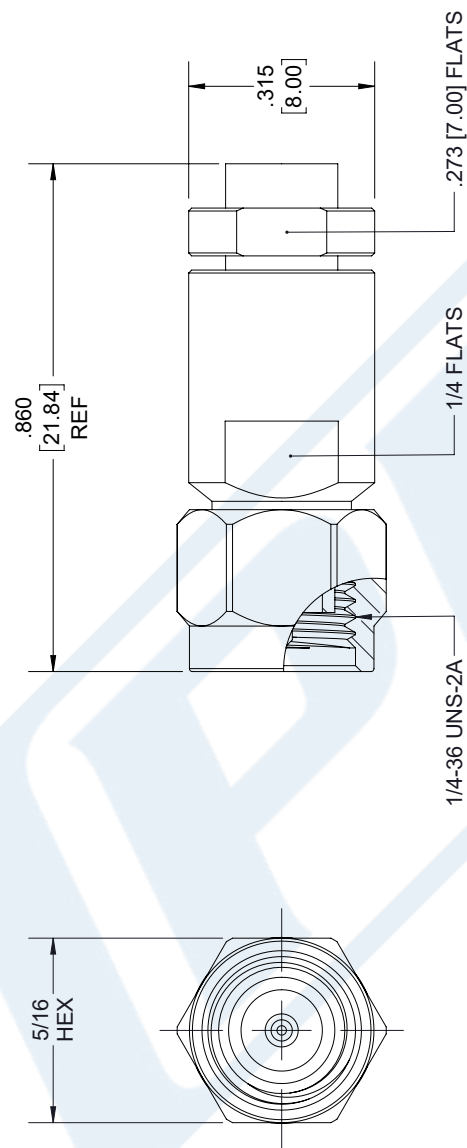
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402 PE4981](https://www.pasternack.com/3.5mm-male-pe-sr402al-pe-sr402fl-pe-sr402tn-rg402-connector-pe4981-p.aspx)

URL: <https://www.pasternack.com/3.5mm-male-pe-sr402al-pe-sr402fl-pe-sr402tn-rg402-connector-pe4981-p.aspx>

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### 3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402

| REVISIONS |                    |          |          |
|-----------|--------------------|----------|----------|
| REV.      | DESCRIPTION        | DATE     | APPROVED |
| 1.2       | PCR PE4981 2019056 | 05/13/19 | J.GARCIA |



|                                                                                                                                                                                                                                    |  |  |                                                                                                                                                                                                                                                                                                           |  |  |                                                                                                                                       |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|---------------------------------------------------------------------------------------------------------------------------------------|--|--|
| <div>UNLESS OTHERWISE SPECIFIED<br/>DRAWING DIMENSIONS ARE INCHES<br/>DIMENSIONS IN IT ARE MILLIMETERS</div>                                                                                                                       |  |  | <div><div><div><div>PE</div><div>PASTERNAK</div><div>an INFINITE® brand</div></div><div>Pasternak Enterprises, Inc.<br/>P.O.Box 16759, Irvine, CA 92623.<br/>Phone: 1.949.261.1920   1.866.727.8376<br/>Fax: 1.949.261.7451</div><div>www.pasternack.com   e-mail: sales@pasternack.com</div></div></div> |  |  | <div>THE INFORMATION AND<br/>DESIGN IN THIS DOCUMENT<br/>IS THE PROPERTY OF<br/>PASTERNAK CORPORATION.<br/>ALL RIGHTS RESERVED.</div> |  |  |
| <div><div>TOLERANCES:</div><div><div>X±.2</div><div>[.08]</div><div>FRACTIONS</div></div><div><div>.XX±.01</div><div>[.25]</div><div>± 1/32</div></div><div><div>.XXX±.005</div><div>[.13]</div><div>ANGLES ± 1°</div></div></div> |  |  | <div>SHEET 1 OF 2</div>                                                                                                                                                                                                                                                                                   |  |  |                                                                                                                                       |  |  |
| <div>ALL DIMENSIONS SHOWN<br/>ARE FOR REFERENCE ONLY.</div>                                                                                                                                                                        |  |  | <div>SCALE N/A</div>                                                                                                                                                                                                                                                                                      |  |  |                                                                                                                                       |  |  |
| <div>THIRD-ANGLE PROJECTION</div>                                                                                                                                                                                                  |  |  | <div>REV 1.2</div>                                                                                                                                                                                                                                                                                        |  |  |                                                                                                                                       |  |  |
| <div><div><div><div><div></div><div>⊕</div></div><div><div></div><div>⊕</div></div></div><div><div></div><div>⊕</div></div></div></div>                                                                                            |  |  | <div>SIZE A</div>                                                                                                                                                                                                                                                                                         |  |  |                                                                                                                                       |  |  |
| <div>CAGE 53919</div>                                                                                                                                                                                                              |  |  | <div>DRAWN BY K.Dang</div>                                                                                                                                                                                                                                                                                |  |  |                                                                                                                                       |  |  |
| <div>PE4981</div>                                                                                                                                                                                                                  |  |  | <div>PART NUMBER</div>                                                                                                                                                                                                                                                                                    |  |  |                                                                                                                                       |  |  |

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SMA Male Connector Solder Attachment for PE-SR402AL,  
PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402

## RF Connectors Technical Data Sheet

**PE44691**

### Configuration

- SMA Male Connector
- 50 Ohms
- Straight Body Geometry
- PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402 Interface Type
- Solder Attachment
- 5/16 inch Hex

### Features

- Max. Operating Frequency 18 GHz

### Applications

- General Purpose Test
- Custom Cable Assemblies

### Description

Pasternack's PE44691 SMA male connector with solder attachment for PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN and RG402 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 18 GHz.

Our SMA male connector PE44691 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      |         | 18      | GHz   |

### Mechanical Specifications

|               |                                  |
|---------------|----------------------------------|
| <b>Size</b>   |                                  |
| Length        | 0.441 in [11.2 mm]               |
| Width/Dia.    | 0.315 in [8.00 mm]               |
| Weight        | 0.005 lbs [2.27 g]               |
| Mating Torque | 8 to 10 in-lbs [0.90 to 1.13 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 Connector Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402 PE44691](#)





SMA Male Connector Solder Attachment for PE-SR402AL,  
PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402

## RF Connectors Technical Data Sheet

**PE44691**

### Material Specifications

| Description  | Material                   | Plating          |
|--------------|----------------------------|------------------|
| Body         | Brass                      | Gold over Nickel |
| Coupling Nut | Passivated Stainless Steel |                  |

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

### Plotted and Other Data

Notes:

SMA Male Connector Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402 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 Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402 PE44691](#)

URL: <https://www.pasternack.com/sma-male-standard-pe-sr402al-pe-sr402fl-pe-sr402flj-connector-pe44691-p.aspx>

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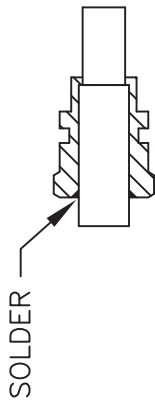
# PE44691 CAD Drawing

SMA Male Connector Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402

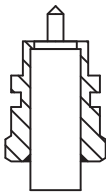
## ASSEMBLY PROCEDURES



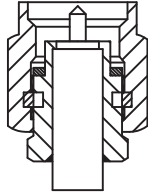
1. STRIP CABLE AS SHOWN.



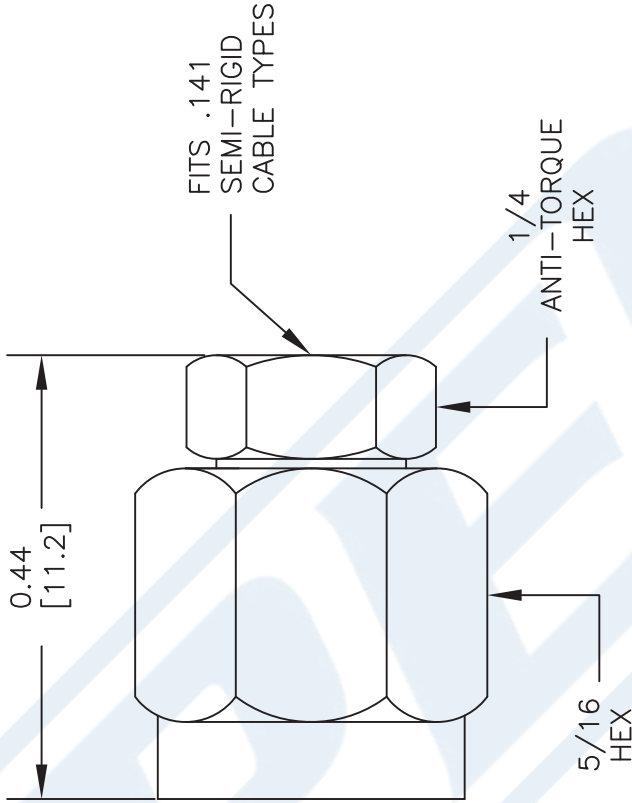
2. SOLDER CONNECTOR BODY.



3. TRIM DIELECTRIC, DO NOT NICK CENTER CONDUCTOR AND POINT THE CENTER CONTACT OF CABLE.



4. INSTALL THE COUPLING NUT.



DWG TITLE

**PE44691**

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].
4. FITS MIL-C-17 AND EQUIVALENT CABLES.

**Pasternack Enterprises, Inc.**  
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REV. A FSCM NO. 53919

CAD FILE 050412

SCALE N/A

SIZE A

2233

## RG402 Coax Cable with Copper Outer Conductor

### RF Cables Technical Data Sheet

**RG402/U**

#### Configuration

- Semi-Rigid Cable
- M17/130-RG402
- 1 Shield(s)

#### Electrical Specifications

| Description                          | Minimum | Typical | Maximum | Units |
|--------------------------------------|---------|---------|---------|-------|
| Frequency Range                      | DC      |         | 34      | GHz   |
| Impedance                            |         | 50      |         | Ohms  |
| Velocity of Propagation              |         | 69.5    |         | %     |
| Dielectric Withstanding Voltage (AC) |         |         | 5,000   | Vrms  |
| Corona Discharge<br>at 60 Hz         |         |         | 1,900   | Vrms  |

#### Performance by Frequency Band

| Description           | F1    | F2    | F3    | F4     | F5     | Units    |
|-----------------------|-------|-------|-------|--------|--------|----------|
| Frequency             | 0.5   | 1     | 5     | 10     | 18     | GHz      |
| Attenuation, Typ      | 7.6   | 11.1  | 28.1  | 43.4   | 63.6   | dB/100ft |
|                       | 24.93 | 36.42 | 92.19 | 142.39 | 208.66 | dB/100m  |
| Input Power (CW), Max | 600   | 450   | 180   | 120    | 73     | Watts    |

| Description           | F6     | F7 | F8 | F9 | F10 | Units    |
|-----------------------|--------|----|----|----|-----|----------|
| Frequency             | 26.5   |    |    |    |     | GHz      |
| Attenuation, Typ      | 82.8   |    |    |    |     | dB/100ft |
|                       | 271.65 |    |    |    |     | dB/100m  |
| Input Power (CW), Max | 70     |    |    |    |     | Watts    |

#### Mechanical Specifications

Min. Bend Radius (Repeated)

0.25 in [6.35 mm]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [RG402 Coax Cable with Copper Outer Conductor RG402/U](#)

## RG402 Coax Cable with Copper Outer Conductor

**RF Cables**  
**Technical Data Sheet****RG402/U****Construction Specifications**

| Description     | Material and Plating                | Diameter         |
|-----------------|-------------------------------------|------------------|
| Inner Conductor | Copper Clad Steel, Silver, 1 Strand | 0.036 in 0.91 mm |
| Conductor Type  | Solid                               |                  |
| Dielectric      | PTFE                                | 0.118 in [3 mm]  |
| Outer Conductor | Copper<br>.141                      |                  |
| Jacket          | Tan                                 |                  |

**Environmental Specifications****Temperature**

Operating Range -55 to +125 deg C

**Compliance Certifications** (see [product page](#) for current document)**Plotted and Other Data**

Notes:

RG402 Coax Cable with Copper Outer Conductor 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.

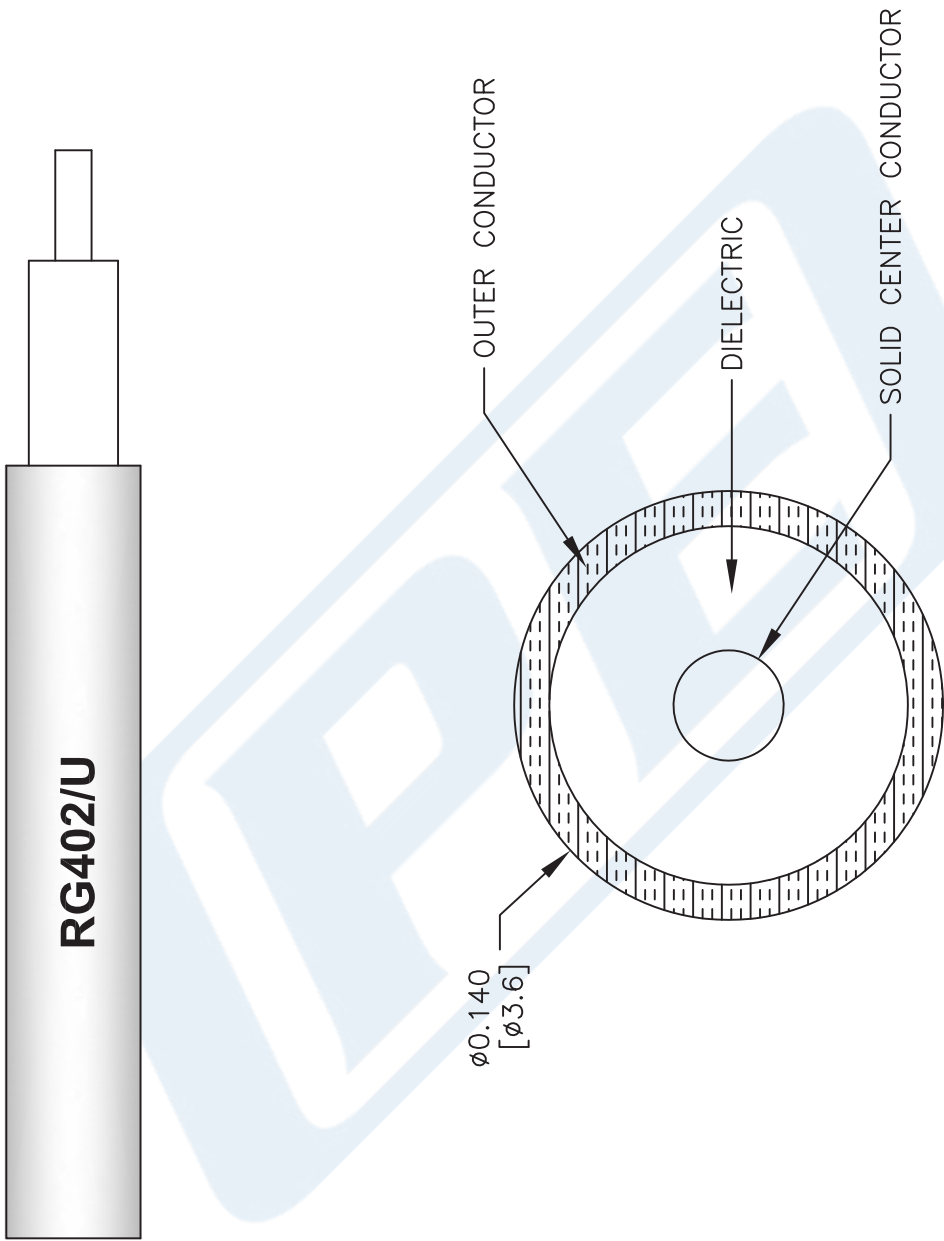
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [RG402 Coax Cable with Copper Outer Conductor RG402/U](#)

URL: <https://www.pasternack.com/semirigid-0.141-rg402-50-ohm-coax-cable-copper-rg402-u-p.aspx>

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RG402/U CAD Drawing

RG402 Coax Cable with Copper Outer Conductor



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3. DIMENSIONS ARE IN INCHES [mm].

DWG TITLE  
**RG402/U**

FSCM NO. 53919

SIZE A

41742

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THE ENGINEER'S RF SOURCE

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