

## 2.92mm Male Precision Connector Clamp/Solder Attachment for PE-SR405AL, PE-SR405FL, PE-SR405FLJ, PE-SR405TN, RG405



### RF Connectors Technical Data Sheet

PE44796

#### Configuration

- 2.92mm Male Connector
- 50 Ohms
- Straight Body Geometry
- PE-SR405AL, PE-SR405FL, PE-SR405FLJ, PE-

- SR405TN, RG405 Interface Type
- Clamp/Solder Attachment
- 5/16 inch Hex
- Precision Design

#### Features

- Max. Operating Frequency 40 GHz
- Excellent VSWR of 1.18:1

- Gold over Nickel Plated Beryllium Copper Contact
- 50 µin minimum contact plating

#### Applications

- General Purpose Test
- Precision Test & Measurement
- Custom Cable Assemblies

#### Description

Pasternack's PE44796 2.92mm male precision connector with clamp/solder attachment for PE-SR405AL, PE-SR405FL, PE-SR405FLJ, PE-SR405TN and RG405 is part of our full line of RF components available for same-day shipping. Our 2.92mm male connector operates up to a maximum frequency of 40 GHz and offers excellent VSWR of 1.18:1.

Our 2.92mm male connector PE44796 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      |         | 40      | GHz   |
| VSWR                                   |         |         | 1.18:1  |       |
| Insertion Loss                         |         | 0.26    |         | dB    |
| Operating Voltage (AC)                 |         | 170     |         | Vrms  |
| Dielectric Withstanding Voltage (AC)   |         | 500     |         | Vrms  |
| High Potential Voltage<br>5 to 7.5 MHz |         |         | 325     | Vrms  |
| Corona Discharge<br>at 70,000 ft       |         |         | 125     | Vrms  |
| Insulation Resistance                  | 5,000   |         |         | MOhms |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [2.92mm Male Precision Connector Clamp/Solder Attachment for PE-SR405AL, PE-SR405FL, PE-SR405FLJ, PE-SR405TN, RG405 PE44796](#)

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## RF Connectors Technical Data Sheet

PE44796

### Performance by Frequency

| Description     | F1       | F2         | F3         | F4 | F5 | Units |
|-----------------|----------|------------|------------|----|----|-------|
| Frequency Range | DC to 18 | 18 to 26.5 | 26.5 to 40 |    |    | GHz   |
| VSWR, Max       | 1.12:1   | 1.14:1     | 1.18:1     |    |    |       |

### Electrical Specification Notes:

Insertion loss:  $0.04 \times \text{sqrt}(f\text{GHz})$  dB max.

### Mechanical Specifications

#### Size

Length  
Width/Dia.

0.813 in [20.65 mm]  
0.315 in [8.00 mm]

Weight

0.014 lbs [6.35 g]

Mating Cycles  
Mating Torque

500 Cycles  
8 to 10 in-lbs [0.90 to 1.13 Nm]

### Material Specifications

| Description  | Material                   | Plating                                 |
|--------------|----------------------------|---|
| Contact      | Beryllium Copper           | Gold over Nickel<br>50 $\mu$ in minimum |
| Insulation   | PCTFE                      |   |
| Body         | Passivated Stainless Steel | SAE-AMS-2700                            |
| Coupling Nut | Passivated Stainless Steel | SAE-AMS-2700                            |

### Environmental Specifications

#### Temperature

|                 |   |
|-----------------|---|
| Operating Range | -65 to +165 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      |
| Salt Spray      | MIL-STD-202, Method 101, Condition B (5%) |

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## RF Connectors Technical Data Sheet

PE44796

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

### Plotted and Other Data

Notes:

2.92mm Male Precision Connector Clamp/Solder Attachment for PE-SR405AL, PE-SR405FL, PE-SR405FLJ, PE-SR405TN, RG405 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.

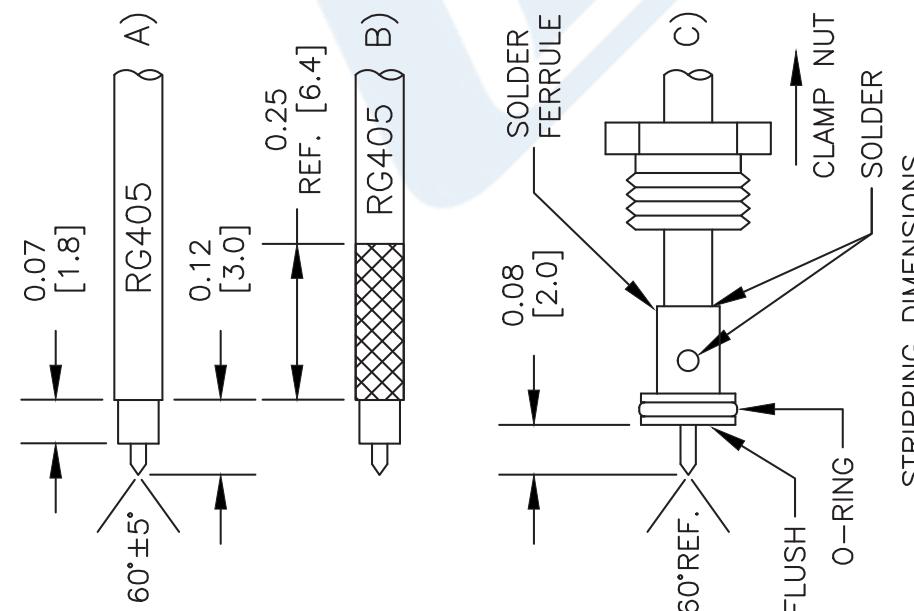
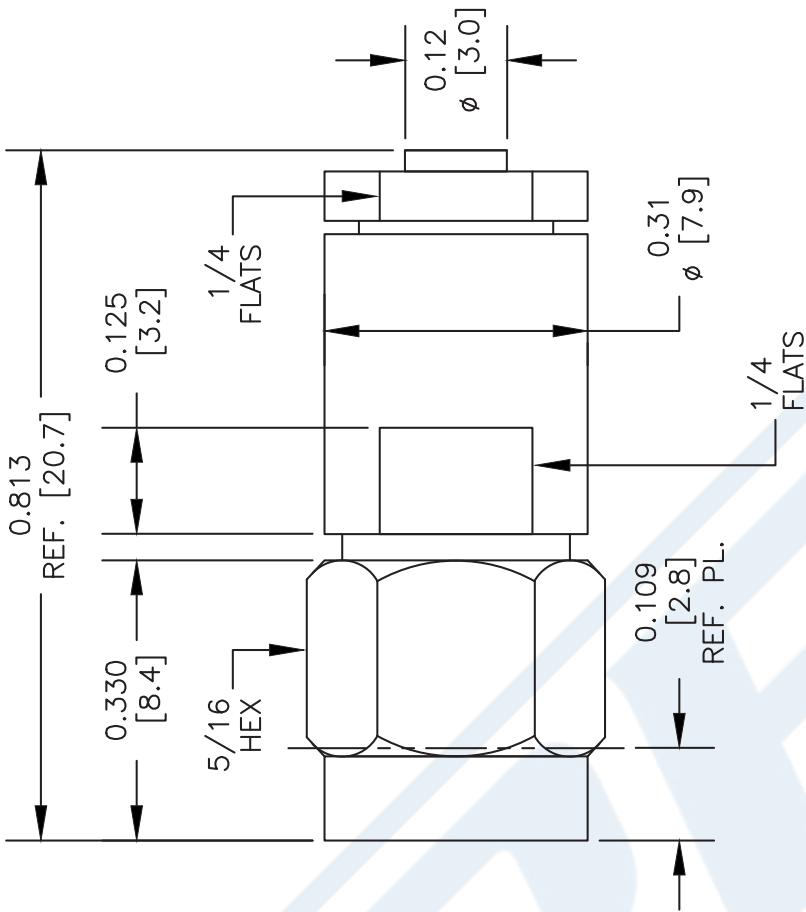
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [2.92mm Male Precision Connector Clamp/Solder Attachment for PE-SR405AL, PE-SR405FL, PE-SR405FLJ, PE-SR405TN, RG405 PE44796](#)

URL: <https://www.pasternack.com/2.92mm-male-standard-pe-sr405al-pe-sr405fl-pe-sr405flj-rg405-connector-pe44796-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.

# PE44796 CAD Drawing

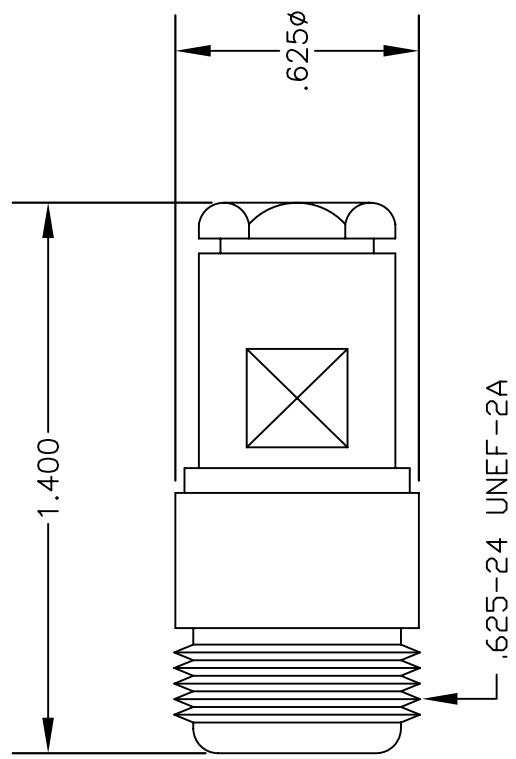
2.92mm Male Precision Connector Clamp/Solder Attachment for PE-SR405AL, PE-SR405FL, PE-SR405FLJ, PE-SR405TN, RG405



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.

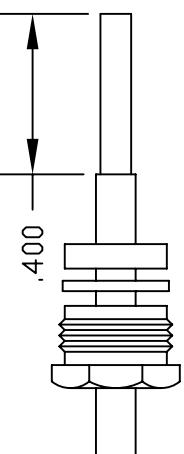
| DWG TITLE   | PE44796        | SIZE A   |        |           |
|---|----------------|----------|--------|-----------|
| PASTERNAK®<br>Pasternack Enterprises, Inc.<br>P.O. Box 16759   Irvine   CA   92623<br>Phone: (949) 261-1920   Fax: (949) 261-7451<br>Website: <a href="http://www.pastermack.com">www.pastermack.com</a>   E-Mail: <a href="mailto:sales@pastermack.com">sales@pastermack.com</a> | FSCM NO. 53919 | CAD FILE | 042313 | SCALE N/A |

| MATERIALS      |                     |
|----------------|---------------------|
| BODY           | BRASS NICKEL PLATED |
| CONTACT        | SILVER PLATED       |
| INSULATOR      | PTFE                |
| SOLDER ADAPTER | BRASS GOLD PLATED   |

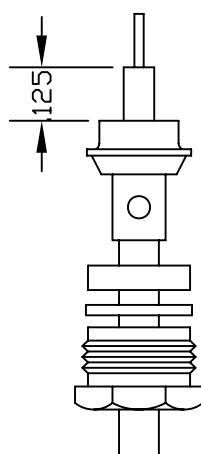


#### ASSEMBLY PROCEDURES

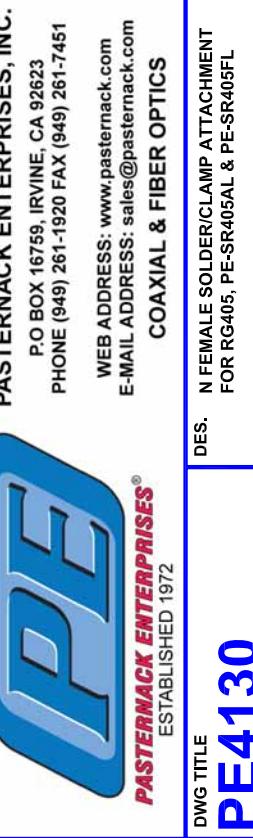
1. SLIDE CLAMP NUT (1), WASHER (2) & GASKET (3) OVER CABLE. STRIP CABLE AS SHOWN IN ASSEMBLY (A). DO NOT CUT DIELECTRIC.
2. SLIDE ADAPTER (4) OVER CABLE UNTIL ADAPTER (4) BOTTOMS ON OUTER CONDUCTOR. SOLDER ADAPTER (4) TO OUTER CONDUCTOR USING MINIMUM HEAT.
3. STRIP CABLE AS SHOWN IN ASSEMBLY (B). SOLDER CONTACT TO CENTER CONDUCTOR. SLIDE ASSEMBLY FORWARD & TIGHTEN TO BODY.



ASSEMBLY (A)



ASSEMBLY (B)



| REV.- | DWG TITLE     | DES.                  | CAD FILE | SCALE | SIZE | NOTES: |
|-------|---------------|-----------------------|----------|-------|------|--------|
|       | <b>PE4130</b> | <b>FSCM NO. 53919</b> | 042309   | N/A   | N/A  | 147    |

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 3. DIMENSIONS ARE IN INCHES.

## 086 Semi-rigid Coax Cable with Tinned Aluminum Outer Conductor

### RF Cables Technical Data Sheet

**PE-SR405AL**

#### Configuration

- Semi-Rigid Cable
- 1 Shield(s)

#### Features

- Tinned Aluminum Outer Conductor
- Max Frequency 40 GHz

#### Applications

|                         |                         |                       |
|-------------------------|-------------------------|-----------------------|
| • Test and Measurement  | • Medical Equipment     | • Field Installations |
| • Communication Systems | • RADAR                 |                       |
| • Wireless Systems      | • Low Loss Applications |                       |

#### Description

Semi-rigid coaxial cable provides the highest electrical performance including low loss and high RF shielding effectiveness, which is why it is the cable type of choice for many RF and microwave engineers. Pasternack's PE-SR405AL is a .086 semi-rigid coax cable constructed with silver plated copper clad steel inner conductor, solid PTFE dielectric and tinned aluminum outer conductor. This .086 semi-rigid cable has a maximum operating frequency of 40 GHz and is designed as a superior alternative to the standard RG-405 cable. Semi-rigid cable is used in a wide variety of applications including when higher operating frequency or precision performance is required. PE-SR405AL .086 semi-rigid coaxial cable datasheet specifications and outline drawing 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      |         | 40      | GHz   |
| Impedance                            |         | 50      |         | Ohms  |
| Dielectric Withstanding Voltage (AC) |         |         | 5,000   | Vrms  |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [086 Semi-rigid Coax Cable with Tinned Aluminum Outer Conductor PE-SR405AL](#)

# 086 Semi-rigid Coax Cable with Tinned Aluminum Outer Conductor

## RF Cables Technical Data Sheet

**PE-SR405AL**

### Performance by Frequency Band

| Description           | F1    | F2     | F3     | F4 | F5 | Units    |
|-----------------------|-------|--------|--------|----|----|----------|
| Frequency             | 1     | 10     | 20     |    |    | GHz      |
| Attenuation, Max      | 23    | 81     | 131    |    |    | dB/100ft |
|                       | 75.46 | 265.75 | 429.79 |    |    | dB/100m  |
| Input Power (CW), Max | 130   | 35     | 20     |    |    | Watts    |

### Mechanical Specifications

Min. Bend Radius (Installation)

0.05 in [1.27 mm]

### Construction Specifications

| Description     | Material and Plating                 | Diameter           |
|-----------------|--------------------------------------|--------------------|
| Inner Conductor | Copper Clad Steel, Silver, 1 Strands | 0.02 in [0.51 mm]  |
| Conductor Type  | Solid                                |                    |
| Dielectric      | PTFE                                 | 0.066 in [1.68 mm] |
| Outer Conductor | Tinned Aluminum                      | 0.086 in [2.18 mm] |

### Environmental Specifications

#### Temperature

Operating Range

-55 to +125 deg C

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [086 Semi-rigid Coax Cable with Tinned Aluminum Outer Conductor PE-SR405AL](#)

## 086 Semi-rigid Coax Cable with Tinned Aluminum Outer Conductor

### RF Cables Technical Data Sheet

**PE-SR405AL**

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

#### Plotted and Other Data

Notes:

086 Semi-rigid Coax Cable with Tinned Aluminum 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.

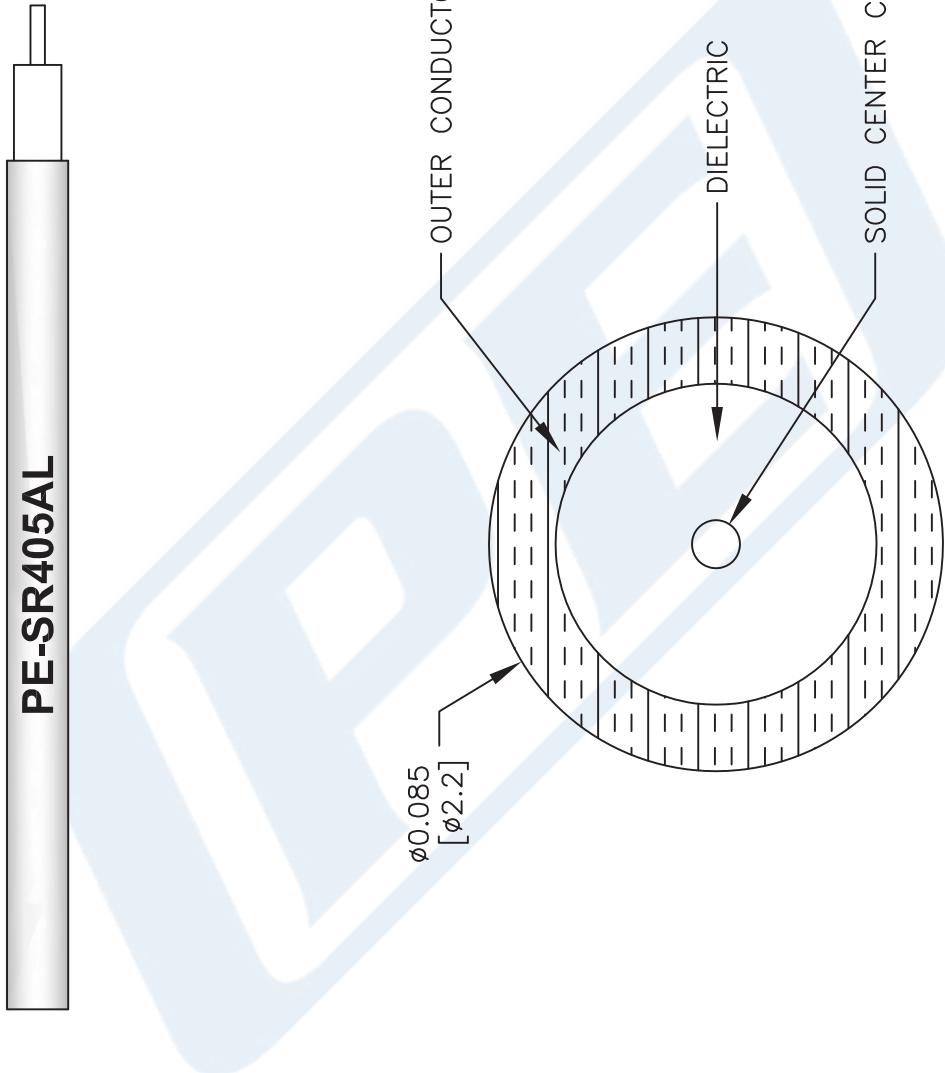
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URL: <https://www.pasternack.com/semirigid-0.085-50-ohm-coax-cable-tinned-aluminum-pe-sr405al-p.aspx>

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# PE-SR405AL CAD Drawing

086 Semi-rigid Coax Cable with Tinned Aluminum Outer Conductor



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| DWG TITLE | PE-SR405AL |
|-----------|------------|
| FSCM NO.  | 53919      |

CAD FILE

SCALE N/A

SIZE A

41742

|  |   |
|--|---|
| <b>PASTERNACK®</b><br>THE ENGINEER'S RF SOURCE | Pasternack Enterprises, Inc.<br>P.O. Box 16759   Irvine   CA   92623<br>Phone: (949) 261-1920   Fax: (949) 261-7451<br>Website: <a href="http://www.pasternack.com">www.pasternack.com</a>   E-Mail: <a href="mailto:sales@pasternack.com">sales@pasternack.com</a> |
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