



## Mini SMP Female Connector Solder Attachment for PE-SR405AL, PE-SR405FL, PE-SR405FLJ, PE-SR405TN, RG405

### RF Connectors Technical Data Sheet

**PE44492**

#### Configuration

- Mini SMP Female Connector
- MIL-STD-348A
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: PE-SR405AL, PE-SR405FL, PE-SR405FLJ, PE-SR405TN, RG405

#### Features

- Max. Operating Frequency 40 GHz
- Gold Plated Beryllium Copper Contact
- Blind Mate Connector

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE44492 Mini SMP female connector with 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 Mini SMP female connector operates up to a maximum frequency of 40 GHz. The Pasternack blind mate connector is ideal for applications where direct visual or tactile access to the connection point is not possible, for example, when two circuit boards need to be mated.

Our Mini SMP female connector PE44492 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   |
| Operating Voltage (AC)        |         |         | 325     | Vrms  |
| Inner Conductor DC Resistance |         |         | 6       | mOhms |
| Outer Conductor DC Resistance |         |         | 2       | mOhms |
| Insulation Resistance         | 5,000   |         |         | MOhms |

#### 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       | 1.11:1   | 1.23:1     | 1.5:1      |    |    |       |

Electrical Specification Notes:  
Insertion loss =  $0.05 \times \sqrt{f(\text{GHz})}$  dB max up to 26.5 GHz.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Mini SMP Female Connector Solder Attachment for PE-SR405AL, PE-SR405FL, PE-SR-405FLJ, PE-SR405TN, RG405 PE44492](#)



Mini SMP Female Connector Solder Attachment for PE-SR405AL, PE-SR405FL, PE-SR405FLJ, PE-SR405TN, RG405

## RF Connectors Technical Data Sheet

**PE44492**

### Mechanical Specifications

#### Size

|            |                      |
|------------|----------------------|
| Length     | 0.343 in [8.71 mm]   |
| Width/Dia. | 0.138 in [3.51 mm]   |
| Height     | 0 in [0 mm]          |
| Weight     | 0.00224 lbs [1.02 g] |

### Material Specifications

| Description | Material         | Plating |
|-------------|------------------|---------|
| Contact     | Beryllium Copper | Gold    |
| Insulation  | PTFE             |         |
| Body        | Beryllium Copper | Gold    |

Mechanical Specification Notes:  
Mating cycles: 500 (smooth bore), 100 (full detent) minimum.

### Environmental Specifications

#### Temperature

|                 |                                      |
|-----------------|--------------------------------------|
| Operating Range | -55 to 155 deg C                     |
| Humidity        | MIL-STD-202, Method 106              |
| Shock           | MIL-STD-202, Method 213, Condition A |
| Vibration       | MIL-STD-202, Method 204, Condition A |
| Thermal Shock   | MIL-STD-202, Method 107, Condition B |

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

### Plotted and Other Data

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Mini SMP Female Connector Solder Attachment for PE-SR405AL, PE-SR405FL, PE-SR-405FLJ, PE-SR405TN, RG405 PE44492](#)



Mini SMP Female Connector Solder Attachment for PE-SR405AL, PE-SR405FL, PE-SR405FLJ, PE-SR405TN, RG405

## RF Connectors Technical Data Sheet

**PE44492**

Mini SMP Female Connector 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 99.4% 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: [Mini SMP Female Connector Solder Attachment for PE-SR405AL, PE-SR405FL, PE-SR405FLJ, PE-SR405TN, RG405 PE44492](https://www.pasternack.com/mini-smp-female-standard-pe-sr405al-pe-sr405fl-rg405-connector-pe44492-p.aspx)

URL: <https://www.pasternack.com/mini-smp-female-standard-pe-sr405al-pe-sr405fl-rg405-connector-pe44492-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.

PE44492 CAD Drawing

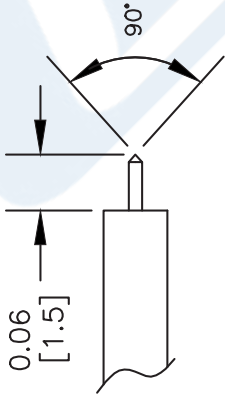
Mini SMP Female Connector Solder Attachment for PE-SR405AL,  
PE-SR405FL, PE-SR405FLJ, PE-SR405TN, RG405



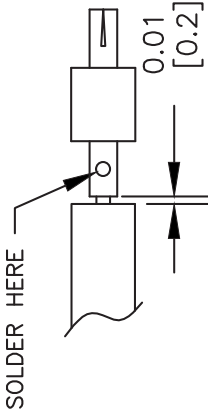
BODY CONTACT

ASSEMBLY PROCEDURES

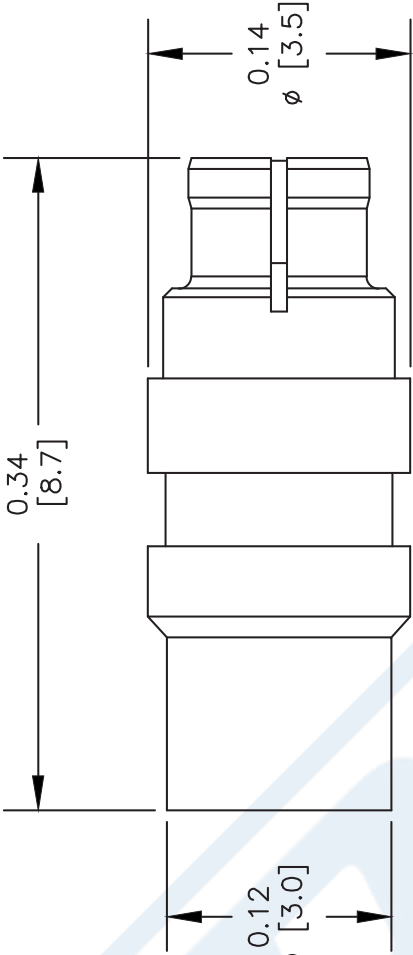
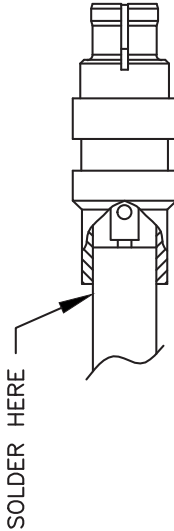
1. STRIP CABLE & CHANFER INNER CONDUCTOR AS SHOWN. DO NOT NICK CENTER CONDUCTOR.



2. SOLDER CONTACT TO CENTER CONDUCTOR MAINTAINING INDICATED SPACING.



3. INSERT CABLE FULLY INTO BODY. SOLDER OUTER CONDUCTOR TO BODY.



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

PE44492

REV. A

FSCM NO. 53919

CAD FILE 021413-A

SCALE N/A

SIZE A

XXXX



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



SMA Male Connector Solder Attachment for  
RG405, RG405 Tinned, PE-SR405AL, PE-  
SR405FL, PE-SR405FLJ, PE-SR405TN

## RF Connectors Technical Data Sheet

PE45480

### Configuration

- SMA Male Connector
- 50 Ohms
- Straight Body Geometry

- Connector Interface Types: RG405, RG405 Tinned, PE-SR405AL, PE-SR405FL, PE-SR405FLJ, PE-SR405TN

### Features

- Max. Operating Frequency 26.5 GHz
- Excellent VSWR of 1.14:1

- Gold Plated Beryllium Copper Contact
- Contact plating according to ASTM-B488

### Applications

- General Purpose Test
- Custom Cable Assemblies

### Description

Pasternack's PE45480 SMA male connector with solder attachment for RG405, RG405 Tinned, PE-SR405AL, PE-SR405FL, PE-SR405FLJ and PE-SR405TN 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 26.5 GHz and offers excellent VSWR of 1.14:1.

Our SMA male connector PE45480 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      |         | 26.5    | GHz   |
| VSWR                                 |         |         | 1.14:1  |       |
| Dielectric Withstanding Voltage (AC) |         |         | 1,000   | Vrms  |
| High Potential Voltage               |         |         | 670     | Vrms  |
| Corona Discharge                     |         |         | 250     | 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: [SMA Male Connector Solder Attachment for RG405, RG405 Tinned, PE-SR405AL, PE-SR-405FL, PE-SR405FLJ, PE-SR405TN PE45480](#)



SMA Male Connector Solder Attachment for  
RG405, RG405 Tinned, PE-SR405AL, PE-  
SR405FL, PE-SR405FLJ, PE-SR405TN

## RF Connectors Technical Data Sheet

PE45480

### Performance by Frequency

| Description     | F1       | F2         | F3 | F4 | F5 | Units |
|-----------------|----------|------------|----|----|----|-------|
| Frequency Range | DC to 18 | 18 to 26.5 |    |    |    | GHz   |
| VSWR, Max       | 1.11:1   | 1.14:1     |    |    |    |       |

Electrical Specification Notes:  
Insertion Loss =  $0.04 \cdot \sqrt{F_{\text{ghz}}}$  dB

### Mechanical Specifications

Mating Cycles 500 Cycles  
Mating Torque 7 to 10 in-lbs [0.79 to 1.13 Nm]

### Material Specifications

| Description  | Material         | Plating           |
|--------------|------------------|-------------------|
| Contact      | Beryllium Copper | Gold<br>ASTM-B488 |
| Insulation   | PTFE             |                   |
| Body         | Beryllium Copper | Gold<br>ASTM-B488 |
| Coupling Nut | Steel            |                   |
| Gasket       | Silicone Rubber  |                   |

### Environmental Specifications

**Temperature**  
Operating Range -65 to +165 deg C  
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

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

### Plotted and Other Data

Notes:

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 RG405, RG405 Tinned, PE-SR405AL, PE-SR-405FL, PE-SR405FLJ, PE-SR405TN PE45480](#)

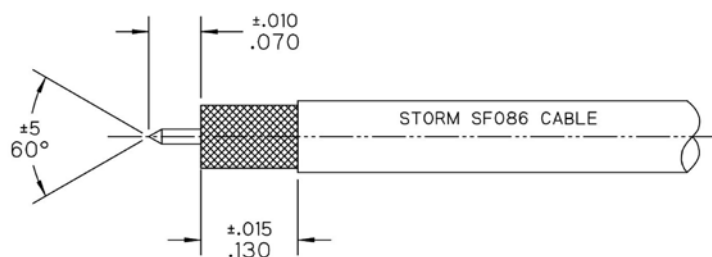


SMA Male Connector Solder Attachment for  
RG405, RG405 Tinned, PE-SR405AL, PE-  
SR405FL, PE-SR405FLJ, PE-SR405TN

RF Connectors  
Technical Data Sheet

PE45480

Assembly Instruction

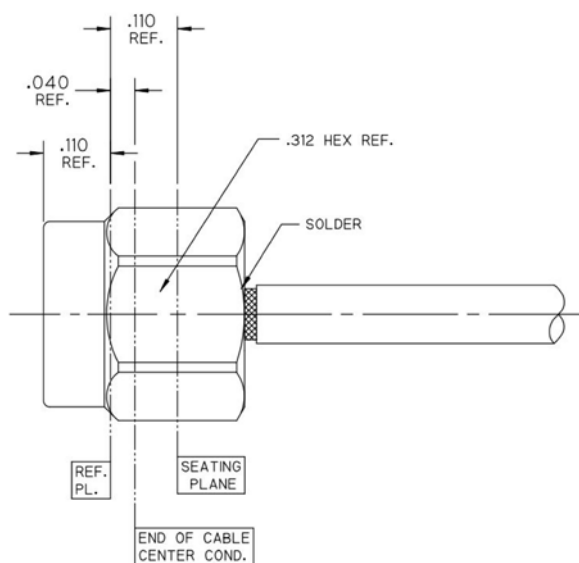


**STEP 1:**

- TRIM CABLE TO EXPOSE CENTER CONDUCTOR AND BRAID AS SHOWN.

**STEP 2:**

- INSERT CABLE INTO CONNECTOR UNTIL CENTER CONDUCTOR PLUGS IN AND CABLE FULLY SEATS IN CONNECTOR BORE.
- SOLDER BRAID TO BODY WHERE SHOWN APPLYING HEAT TO SHORT BODY TAIL SHOULDERS INSIDE COUPLING NUT.



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 RG405, RG405 Tinned, PE-SR405AL, PE-SR-405FL, PE-SR405FLJ, PE-SR405TN PE45480](#)





SMA Male Connector Solder Attachment for  
RG405, RG405 Tinned, PE-SR405AL, PE-  
SR405FL, PE-SR405FLJ, PE-SR405TN

## RF Connectors Technical Data Sheet

PE45480

SMA Male Connector Solder Attachment for RG405, RG405 Tinned, PE-SR405AL, PE-SR405FL, PE-SR405FLJ, PE-SR405TN 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 RG405, RG405 Tinned, PE-SR405AL, PE-SR405FL, PE-SR405FLJ, PE-SR405TN PE45480](https://www.pasternack.com/sma-male-rg405-rg405-tinned-connector-pe45480-p.aspx)

URL: <https://www.pasternack.com/sma-male-rg405-rg405-tinned-connector-pe45480-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.



PE45480 CAD Drawing

SMA Male Connector Solder Attachment for RG405, RG405 Tinned,  
PE-SR405AL, PE-SR405FL, PE-SR405FLJ, PE-SR405TN



STANDARD TOLERANCES

.X ±0.2  
.XX ±0.01  
.XXX ±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES  
NOTES: DISTANCE FROM END OF CABLE CENTER COND. TO REF. PL. IS .040



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

DWG TITLE

PE45480

CAGE CODE 53919

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].

CAD FILE 07/26/18

SCALE N/A

SIZE A

CN2379

## Formable 086 Semi-rigid Coax Cable with Tinned Copper Braid Outer Conductor

### RF Cables Technical Data Sheet

PE-SR405FL

#### Configuration

- Formable Cable
- 1 Shield(s)

#### Features

- Dimensionally the same as standard solid outer conductor semi-rigid coax
- Standard semi-rigid connectors can be used
- Cable is hand formable and does not require special tools to bend
- Connectors are easily soldered to Tin soaked outer conductor
- Cable can be formed more than once without damage to outer conductor
- High RF Shielding >100 dB

#### Description

Formable semi-rigid coax is a hand formable version of standard semi-rigid that does not require complicated and costly pre-formed cable assemblies. Because the dimensions and electrical characteristics are so closely matched to semi-rigid coax, standard semi-rigid connectors can be used. The tin soaked copper braid outer shield provides excellent RF shielding.

#### Electrical Specifications

| Description                   | Minimum | Typical    | Maximum | Units        |
|-------------------------------|---------|------------|---------|--------------|
| Frequency Range               | DC      |            | 20      | GHz          |
| Impedance                     |         | 50         |         | Ohms         |
| Velocity of Propagation       |         | 69.5       |         | %            |
| Inner Conductor DC Resistance |         |            | 65.7    | Ohms/1000ft  |
| Outer Conductor DC Resistance |         |            | 10.2    | Ohms/1000ft  |
| Nominal Capacitance           |         | 29 [95.14] |         | pF/ft [pF/m] |

#### Performance by Frequency Band

| Description      | F1    | F2    | F3     | F4    | F5    | Units    |
|------------------|-------|-------|--------|-------|-------|----------|
| Frequency        | 0.5   | 1     | 5      | 10    | 20    | GHz      |
| Attenuation, Typ | 15    | 22.5  | 54.9   | 81.2  | 120   | dB/100ft |
|                  | 49.21 | 73.82 | 180.12 | 266.4 | 393.7 | dB/100m  |

#### Mechanical Specifications

Min. Bend Radius (Repeated) 0.78 in [19.81 mm]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Formable 086 Semi-rigid Coax Cable with Tinned Copper Braid Outer Conductor PE-SR405FL](#)

## Formable 086 Semi-rigid Coax Cable with Tinned Copper Braid Outer Conductor

### RF Cables Technical Data Sheet

PE-SR405FL

#### 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                                 | 0.062 in [1.57 mm] |
| Outer Conductor | Copper, Tin                          | 0.085 in [2.16 mm] |

#### Environmental Specifications

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

#### Plotted and Other Data

Notes:

Formable 086 Semi-rigid Coax Cable with Tinned Copper Braid 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.

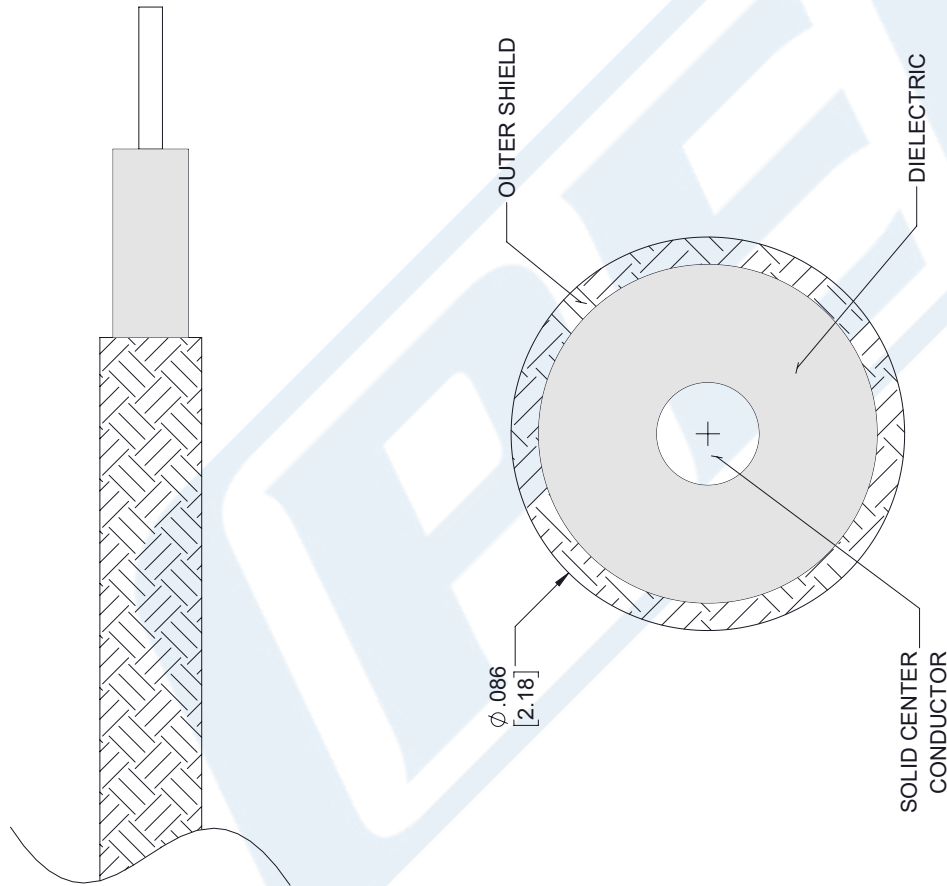
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Formable 086 Semi-rigid Coax Cable with Tinned Copper Braid Outer Conductor PE-SR405FL](#)

URL: <https://www.pasternack.com/formable-0.085-semirigid-replacement-50-ohm-coax-cable-tinned-braid-pe-sr405fl-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.

# PE-SR405FL CAD Drawing

Formable 086 Semi-rigid Coax Cable with Tinned Copper Braid Outer Conductor



## STANDARD TOLERANCES

.X ±0.2  
.XX ±0.01  
.XXX ±0.005

\*STANDARD TOLERANCES APPLY  
ONLY TO DIMENSIONS IN INCHES



Pasternack Enterprises, Inc.  
P.O. Box 16759 | Irvine | CA | 92623  
**Phone:** (949) 261-1920 | **Fax:** (949) 261-7451  
**Website:** [www.pasternack.com](http://www.pasternack.com) | **E-Mail:** [sales@pasternack.com](mailto:sales@pasternack.com)

DWG TITLE

PE-SR405FL

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** 112117

**SCALE** N/A

**SIZE** A

7361