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# 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 x sqrt(fGHz) 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

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# 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

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# 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

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.

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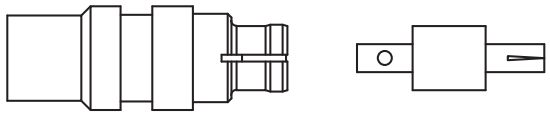
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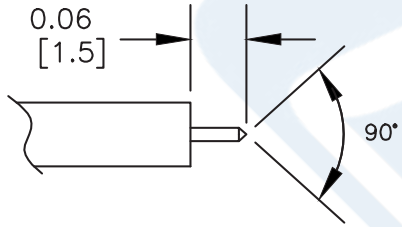
# PE44492 CAD Drawing

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

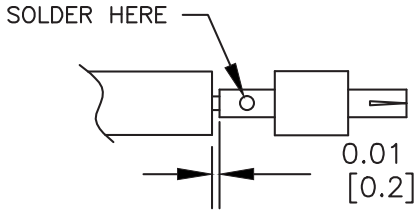



## ASSEMBLY PROCEDURES

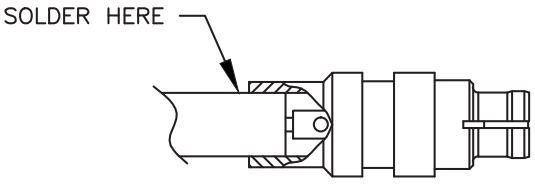
1. STRIP CABLE & CHANFER INNER CONDUCTOR AS SHOWN. DO NOT NICK CENTER CONDUCTOR.

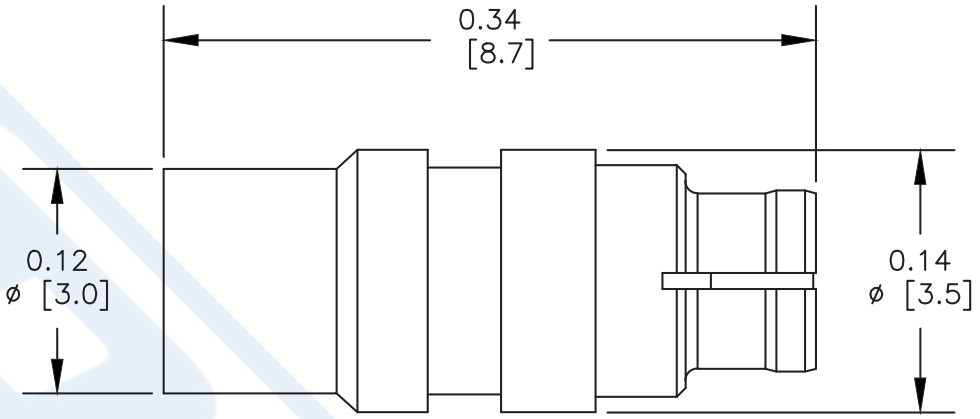



2. SOLDER CONTACT TO CENTER CONDUCTOR MAINTAINING INDICATED SPACING.




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




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DWG TITLE

**PE44492**

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.

| REV. A | FSCM NO. 53919 | CAD FILE 021413-A | SCALE N/A | SIZE A | XXXX |
|---|---|---|---|---|---|

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# 2.4mm Male Connector Solder Attachment for PE-SR405AL, RG405, PE-SR405FLJ

## RF Connectors Technical Data Sheet PE45414

### Configuration

- 2.4mm Male Connector
- 50 Ohms
- Straight Body Geometry
- PE-SR405AL, RG405, PE-SR405FLJ Interface Type
- Solder Attachment
- 5/16 inch Hex

### Features

- Max. Operating Frequency 50 GHz
- Excellent VSWR of 1.16:1
- Gold over Nickel Plated Beryllium Copper Contact
- 50 µin minimum contact plating

### Applications

- General Purpose Test
- Custom Cable Assemblies

### Description

Pasternack's PE45414 2.4mm male connector with solder attachment for PE-SR405AL, RG405 and PE-SR405FLJ is part of our full line of RF components available for same-day shipping. Our 2.4mm male connector operates up to a maximum frequency of 50 GHz and offers excellent VSWR of 1.16:1.

Our 2.4mm male connector PE45414 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 | | 50 | GHz |
| VSWR | | | 1.16:1 | |
| Insertion Loss | | | 0.283 | dB |
| Operating Voltage (AC) | | | 335 | Vrms |
| Dielectric Withstanding Voltage (AC) | | | 1,000 | Vrms |
| High Potential Voltage 5 to 7.5 MHz | | | 670 | Vrms |
| Corona Discharge at 70,000 ft | | | 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: 2.4mm Male Connector Solder Attachment for PE-SR405AL, RG405, PE-SR405FLJ PE45414

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# 2.4mm Male Connector Solder Attachment for PE-SR405AL, RG405, PE-SR405FLJ

## RF Connectors Technical Data Sheet PE45414

### Performance by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|---|---|---|---|---|---|---|
| Frequency Range | DC to 18 | 18 to 26.5 | 26.5 to 40 | 40 to 50 | | GHz |
| VSWR, Max | 1.1:1 | 1.12:1 | 1.14:1 | 1.16:1 | | |

Electrical Specification Notes:
Insertion loss: 0.04 x sqrt(fGHz) dB.

## Mechanical Specifications

### Size

| | |
|---|---|
| Length | 0.58 in [14.73 mm] |
| Width/Dia. | 0.312 in [7.92 mm] |
| Height | 0.35 in [8.89 mm] |
| 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 50 µin minimum |
| Insulation | PEI | |
| Body | Beryllium Copper | Gold over Nickel 50 µin minimum |
| Coupling Nut | Passivated Stainless Steel | ASTM-A582 |
| Retaining Ring | Beryllium Copper | |
| Gasket | Silicone Rubber | |

## Environmental Specifications

### Temperature

| | |
|---|---|
| Operating Range | -65 to +150 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 |
| Salt Spray | MIL-STD-202, Method 101, Condition B, 5% salt solution |

Click the following link (or enter part number in “SEARCH” on website) to obtain additional part information including price, inventory and certifications: 2.4mm Male Connector Solder Attachment for PE-SR405AL, RG405, PE-SR405FLJ PE45414

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# 2.4mm Male Connector Solder Attachment for PE-SR405AL, RG405, PE-SR405FLJ



**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: 2.4mm Male Connector Solder Attachment for PE-SR405AL, RG405, PE-SR405FLJ PE45414

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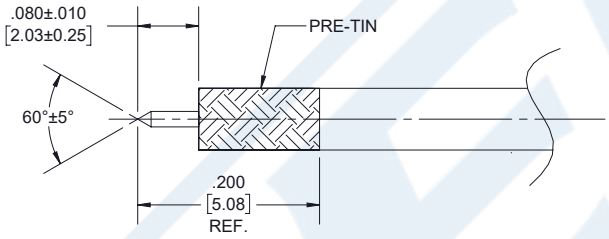


# 2.4mm Male Connector Solder Attachment for PE-SR405AL, RG405, PE-SR405FLJ



**Assembly Instruction**

## Assembly Instructions

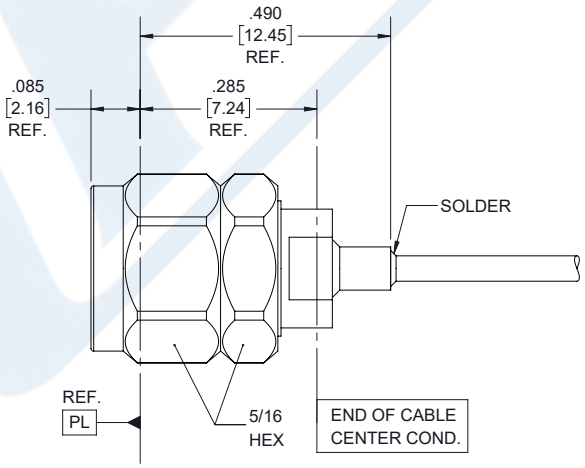



**STEP 1**:

- PRE-TIN CABLE OUTER JACKET OVER APPROX. LENGTH SHOWN.
- TRIM CABLE TO EXPOSE CENTER CONDUCTOR AS SHOWN.
- POINT CENTER CONDUCTOR AS INDICATED.

**STEP 2**:

- INSERT CABLE INTO CONNECTOR UNTIL CENTER CONDUCTOR PLUGS IN AND CABLE SEATS IN CONNECTOR BORE.
- SOLDER CABLE JACKET TO BODY WHERE SHOWN APPLYING HEAT TO EXTENDED BODY TAIL.




Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: 2.4mm Male Connector Solder Attachment for PE-SR405AL, RG405, PE-SR405FLJ PE45414

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# 2.4mm Male Connector Solder Attachment for PE-SR405AL, RG405, PE-SR405FLJ

## RF Connectors Technical Data Sheet PE45414

2.4mm Male Connector Solder Attachment for PE-SR405AL, RG405, PE-SR405FLJ 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: 2.4mm Male Connector Solder Attachment for PE-SR405AL, RG405, PE-SR405FLJ PE45414

URL: https://www.pasternack.com/2.4mm-male-pe-sr405al-rg405-pe-sr405flj-connector-pe45414-p.aspx

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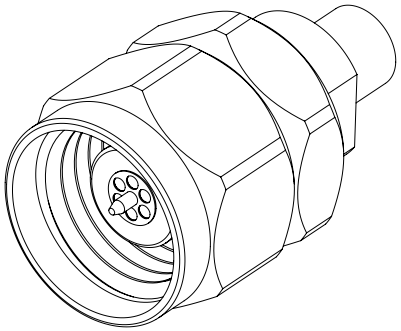
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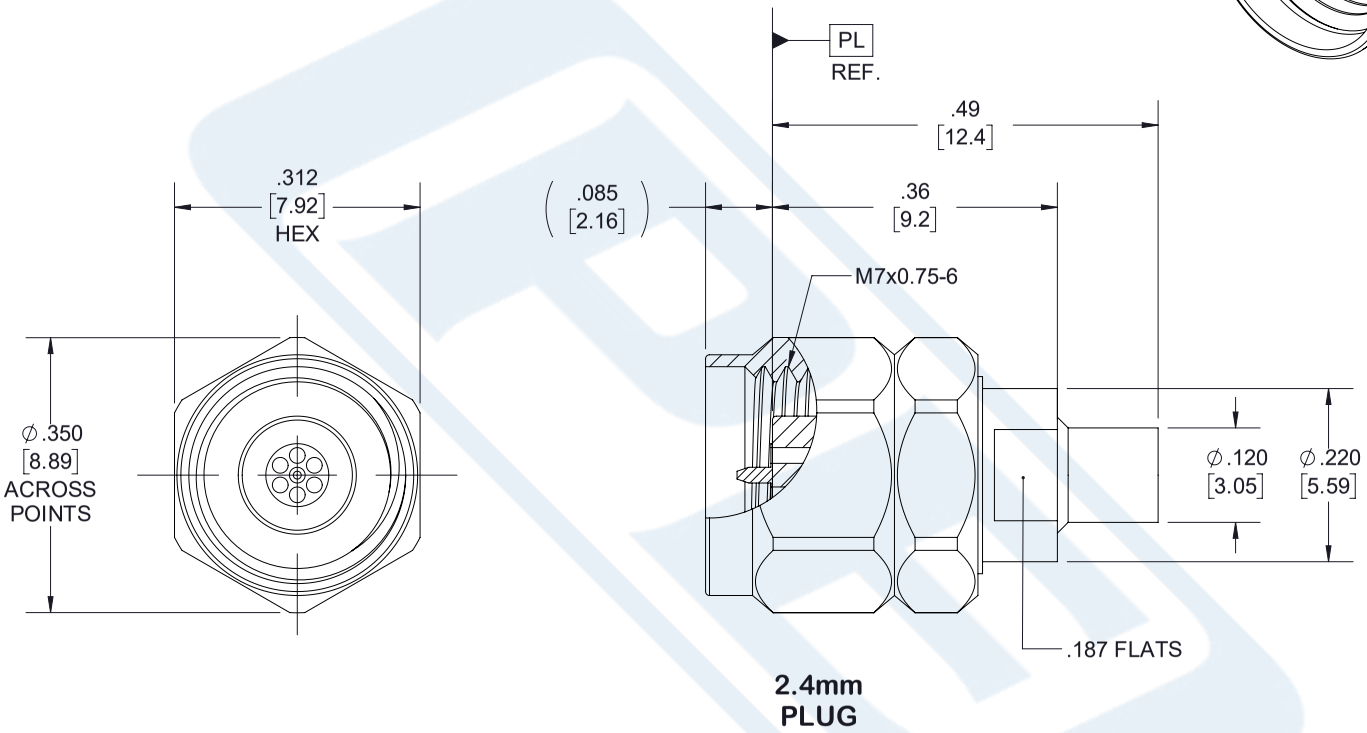
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# PE45414 CAD Drawing

2.4mm Male Connector Solder Attachment for PE-SR405AL, RG405, PE-SR405FLJ






**2.4mm PLUG**

| STANDARD TOLERANCES | |
|---|---|
| .X | ±0.2 |
| .XX | ±0.02 |
| .XXX | ±0.005 |

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

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DWG TITLE

PE45414

NOTES:
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2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].

| CAGE CODE 53919 | CAD FILE 110217 | SCALE N/A | SIZE A | 7361 |
|---|---|---|---|---|

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# RG405 Tinned Coax Cable with Tinned Copper Outer Conductor

RF Cables
Technical Data Sheet

PE-SR405TN

## Configuration

- Semi-Rigid Cable
- MIL-C-17
- 1 Shield(s)

### Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|---|---|---|---|---|
| Frequency Range | DC | | 40 | GHz |
| Impedance | | 50 | | Ohms |

### Performance by Frequency Band

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|---|---|---|---|---|---|---|
| Frequency | 1 | 10 | 20 | | | GHz |
| Attenuation, Typ | 22 | 80 | 120 | | | dB/100ft |
| | 72.18 | 262.47 | 393.7 | | | 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 Strand | 0.02 in 0.51 mm |
| Conductor Type | Solid | |
| Dielectric | PTFE | 0.066 in [1.68 mm] |
| First Shield | Tinned Copper | 0.087 in 2.21 mm |

Click the following link (or enter part number in “SEARCH” on website) to obtain additional part information including price, inventory and certifications: RG405 Tinned Coax Cable with Tinned Copper Outer Conductor PE-SR405TN

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# RG405 Tinned Coax Cable with Tinned Copper Outer Conductor

## RF Cables
## Technical Data Sheet

PE-SR405TN

### Environmental Specifications

**Temperature**

| | |
|---|---|
| Operating Range | -55 to +125 deg C |

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

### Plotted and Other Data

Notes:

RG405 Tinned Coax Cable with Tinned 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: RG405 Tinned Coax Cable with Tinned Copper Outer Conductor PE-SR405TN

URL: https://www.pasternack.com/50-ohm-semi-rigid-rg405-tinned-tinned-copper-pe-sr405tn-p.aspx

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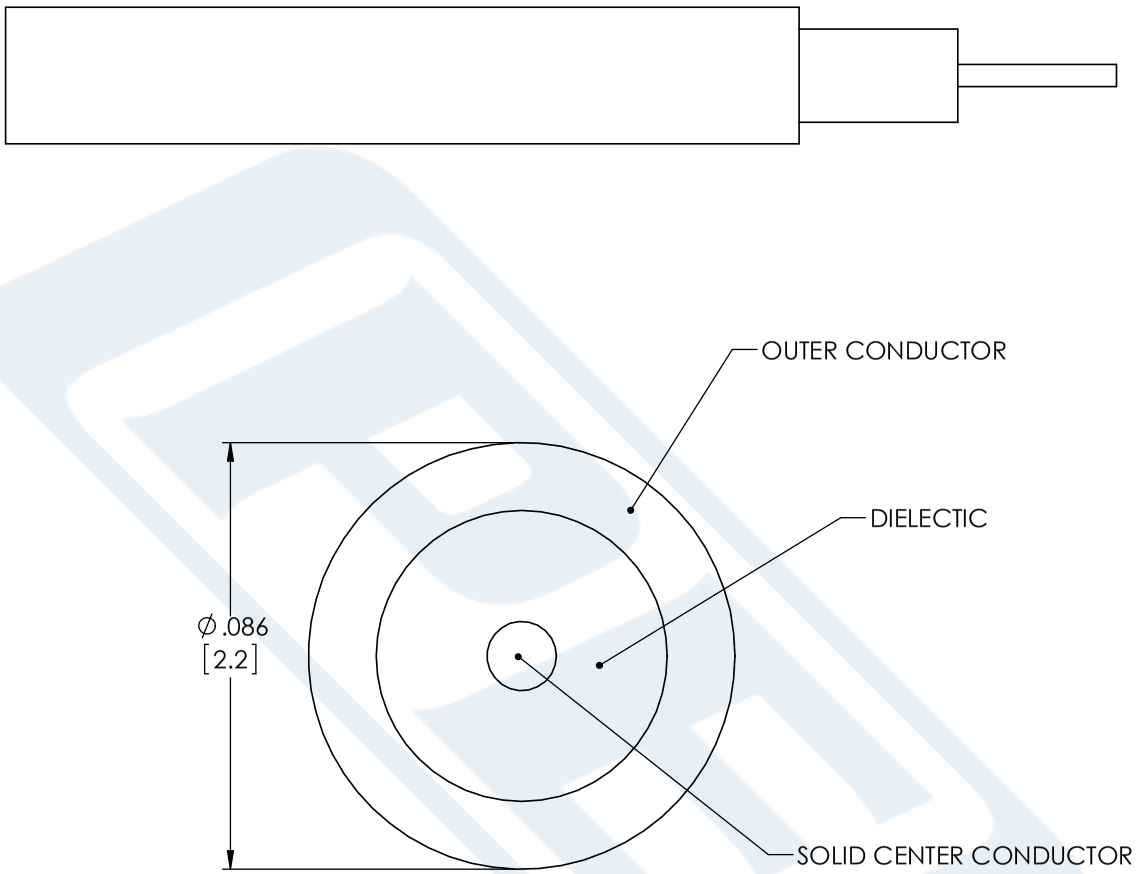
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# PE-SR405TN CAD Drawing

RG405 Tinned Coax Cable with Tinned Copper Outer Conductor




| STANDARD TOLERANCES | |
|---|---|
| .X | ±0.2 |
| .XX | ±0.01 |
| .XXX | ±0.005 |

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

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**DWG TITLE**
PE-SR405TN

**NOTES:**
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3. DIMENSIONS ARE IN INCHES [mm].

| CAGE CODE 53919 | CAD FILE 11/28/17 | SCALE N/A | SIZE A | CN2245 |
|---|---|---|---|---|