PASTERNACK®
THE ENGINEER'S RF SOURCE

# 1.85mm Male Connector Solder Attachment for PE-SR405AL, PE-SR405FL, PE-SR405FLJ, PE-SR405TN, RG405, Direct Solder without Center Contact



## RF Connectors Technical Data Sheet PE44336

## Configuration

- 1.85mm Male Connector
- 50 Ohms
- Straight Body Geometry
- PE-SR405AL, PE-SR405FL, PE-SR405FLJ, PE-SR405TN, RG405 Interface Type
- Solder Attachment
- 1/4 inch Hex

## Features

- Max. Operating Frequency 60 GHz
- Good VSWR of 1.33:1
- Gold over Nickel Plated Beryllium Copper Contact
- Contact plating according to MIL-G-45204

## Applications

- General Purpose Test
- Custom Cable Assemblies

### Description

Pasternack's PE44336 1.85mm male 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 1.85mm male connector operates up to a maximum frequency of 60 GHz and offers good VSWR of 1.33:1.

Our 1.85mm male connector PE44336 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 | | 60 | GHz |
| VSWR | | | 1.33:1 | |
| Insertion Loss | | | 0.39 | dB |

Electrical Specification Notes:
Insertion loss: 0.05 x sqrt(fGHz) dB.

### Mechanical Specifications

| | |
|---|---|
| **Size** | |
| Length | 0.531 in [13.49 mm] |
| Width/Dia. | 0.312 in [7.92 mm] |
| Weight | 0.007 lbs [3.18 g] |
| Mating Cycles | 500 Cycles |
| 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: 1.85mm Male Connector Solder Attachment for PE-SR405AL, PE-SR405FL, PE-SR405FLJ, PE-SR405TN, RG405, Direct Solder without Center Contact PE44336

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
**Phone:** (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
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# 1.85mm Male Connector Solder Attachment for PE-SR405AL, PE-SR405FL, PE-SR405FLJ, PE-SR405TN, RG405, Direct Solder without Center Contact



### Material Specifications

| Description | Material | Plating |
|---|---|---|
| Contact | Beryllium Copper | Gold over Nickel MIL-G-45204 |
| Body | Stainless Steel | Gold over Nickel MIL-G-45204 |
| Coupling Nut | Passivated Stainless Steel | ASTM-A380 |

## Environmental Specifications

**Temperature**

| | |
|---|---|
| Operating Range | -55 to +100 deg C |
| Vibration | MIL-STD-202, Method 204, Condition D (20 G's) |
| Salt Spray | MIL-STD-202, Method 101, Condition B, 5% salt solution |

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

## Plotted and Other Data

Notes:

### Assembly Instruction

1.85mm Male Connector Solder Attachment for PE-SR405AL, PE-SR405FL, PE-SR405FLJ, PE-SR405TN, RG405, Direct Solder without Center Contact 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: 1.85mm Male Connector Solder Attachment for PE-SR405AL, PE-SR405FL, PE-SR405FLJ, PE-SR405TN, RG405, Direct Solder without Center Contact PE44336

URL: https://www.pasternack.com/1.85mm-male-pe-sr405al-pe-sr405fl-rg405-connector-pe44336-p.aspx

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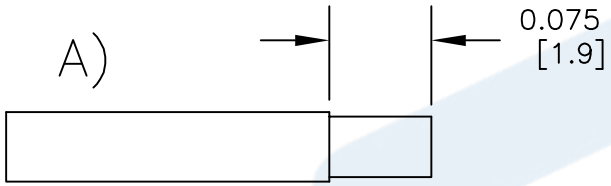
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# PE44336 CAD Drawing

1.85mm Male Connector Solder Attachment for PE-SR405AL, PE-SR405FL, PE-SR405FLJ, PE-SR405TN, RG405, Direct Solder without Center Contact

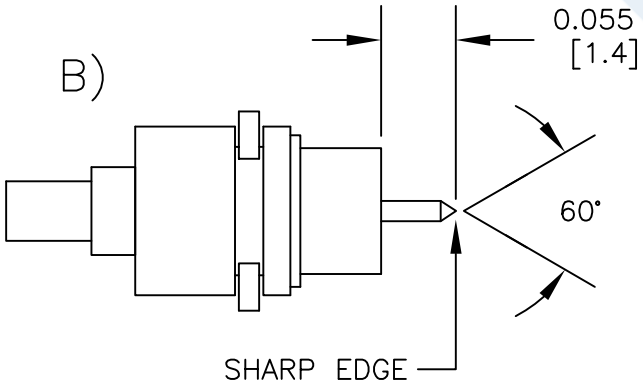
## ASSEMBLY PROCEDURES

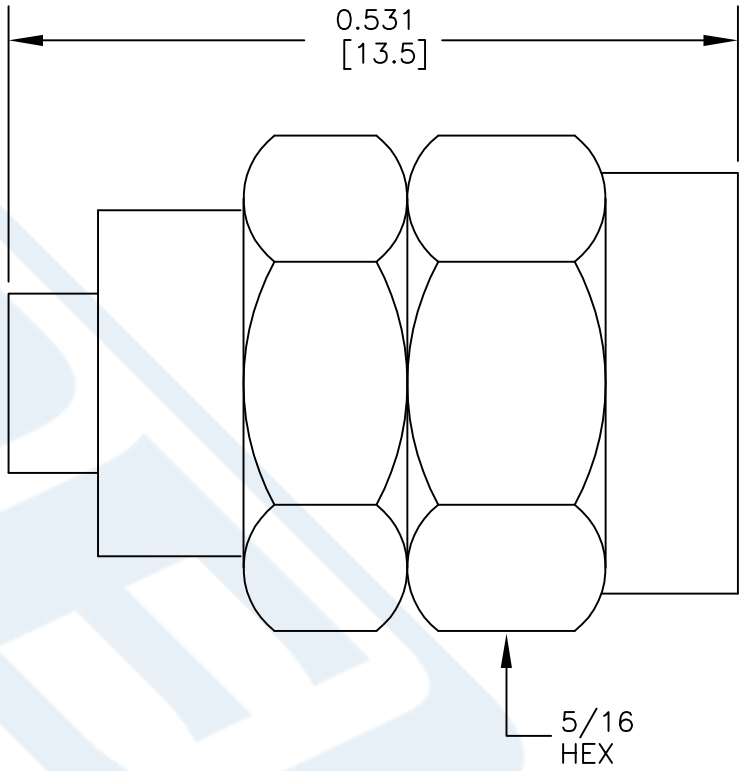
1. STRIP CABLE AS SHOWN IN (A).




2. SLIDE BODY OVER CABLE UNTIL IT STOPS. SOLDER BODY ONTO CABLE.

3. STRIP CABLE AS SHOWN IN ASSEMBLY (B) THEN INSTALL COUPLING NUT, FORM POINT ON COAX CENTER CONDUCTOR AS SHOWN.




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DWG TITLE

**PE44336**

**FSCM NO. 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].
4. FITS MIL-C-17 AND EQUIVALENT CABLES.

| CAD FILE | SCALE | SIZE | |
|---|---|---|---|
| 101414 | N/A | A | 150 |

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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

PE44974

## Configuration

- Mini SMP Female Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: PE-SR405AL, PE-SR-405FL, PE-SR405FLJ, PE-SR405TN, RG405

## Features

- Max. Operating Frequency 26.5 GHz
- Excellent VSWR of 1.15:1
- Gold Plated Beryllium Copper Contact
- Contact plating according to MIL-G-45204
- Blind Mate Connector

## Applications

- General Purpose Test
- Custom Cable Assemblies

### Description

Pasternack's PE44974 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 26.5 GHz and offers excellent VSWR of 1.15:1. 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 PE44974 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 | | | 1.15:1 | |

### Mechanical Specifications

**Size**

| | |
|---|---|
| Length | 0.29 in [7.37 mm] |
| Width/Dia. | 0.125 in [3.18 mm] |
| Weight | 0.005 lbs [2.27 g] |

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 PE44974

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



**Material Specifications**

| Description | Material | Plating |
|---|---|---|
| Contact | Beryllium Copper | Gold<br>MIL-G-45204 |
| Insulation | PTFE | |
| Body | Beryllium Copper | Gold<br>MIL-G-45204 |

## Environmental Specifications

**Temperature**

| | |
|---|---|
| Operating Range | -65 to +165 deg C |

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

## Plotted and Other Data

Notes:

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 PE44974

URL: https://www.pasternack.com/mini-smp-female-standard-rg405-pe-sr405fl-connector-pe44974-p.aspx

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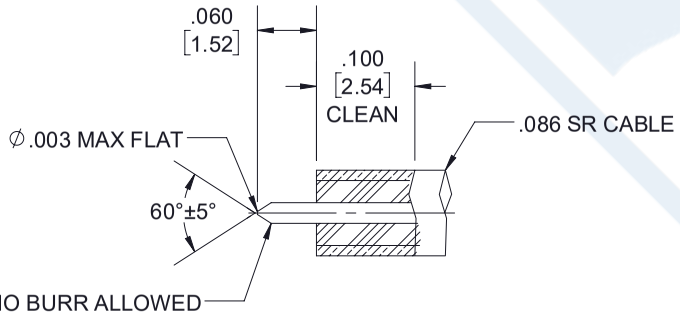
| REVISIONS | | | |
|---|---|---|---|
| REV. | DESCRIPTION | DATE | APPROVED |
| A | PCR PE44974 SC5431 20200916 | 09/30/20 | SRAUTUS |

# PE44974 CAD Drawing

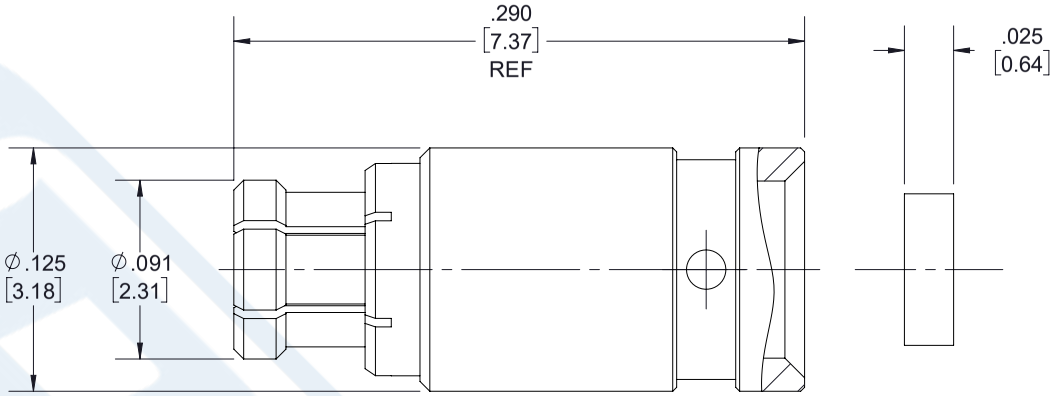
Mini SMP Female Connector Solder Attachment for PE-SR405AL, PE-SR405FL, PE-SR405FLJ, PE-SR405TN, RG405

**ASSEMBLY PROCEDURES:**

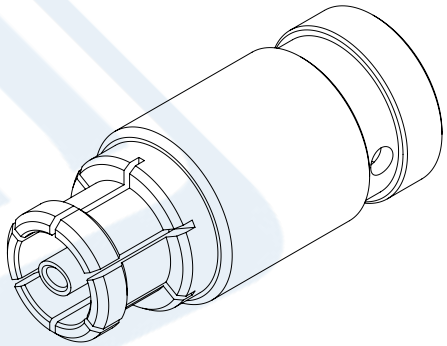
1. TRIM CABLE OUTER CONDUCTOR AND DIELECTRIC TO DIMENSION SHOWN, DO NOT NICK CENTER CONDUCTOR.
2. CLEAN CABLE OUTER CONDUCTOR USING FINE GRAIN SANDPAPER OR STEEL WOOL AS SHOWN.



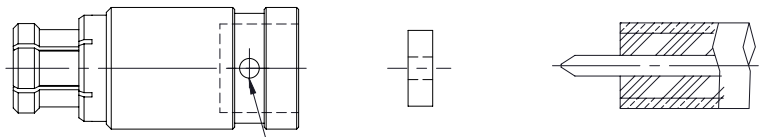

*CABLE TRIM*




**Mini SMP**
**FEMALE**



3. SLIDE DIELECTRIC BEAD ONTO CENTER CONDUCTOR UNTIL IT SEATS AGAINST CABLE.
4. FULLY INSTALL CABLE SUBASSEMBLY INTO BODY AND SOLDER IN PLACE. ENSURE THE CABLE JACKET IS AGAINST CABLE STOP PRIOR TO SOLDERING.



SOLDER ACCESS
TO CABLE SHIELD

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UNLESS OTHERWISE SPECIFIED
LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:

| | |
|---|---|
| .X = ± .2 [5.08] | FRACTIONS ± 1/32 |
| .XX = ± .02 [.51] | ANGLES ± 1° |
| .XXX = ± .005 [.13] | |

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305] = +1 [25] / -0
12 [305] < L ≤ 60 [1524] = +2 [51] / -0
60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
300 [7620] < L = +5%L / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

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THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

| SIZE | CAGE CODE | DRAWN BY | ITEM NO. | REV |
|---|---|---|---|---|
| A | 53919 | SLI | PE44974 | A |

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# 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
- Communication Systems
- Wireless Systems
- Medical Equipment
- RADAR
- Low Loss Applications
- Field Installations

### 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

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# 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

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# 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.

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

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

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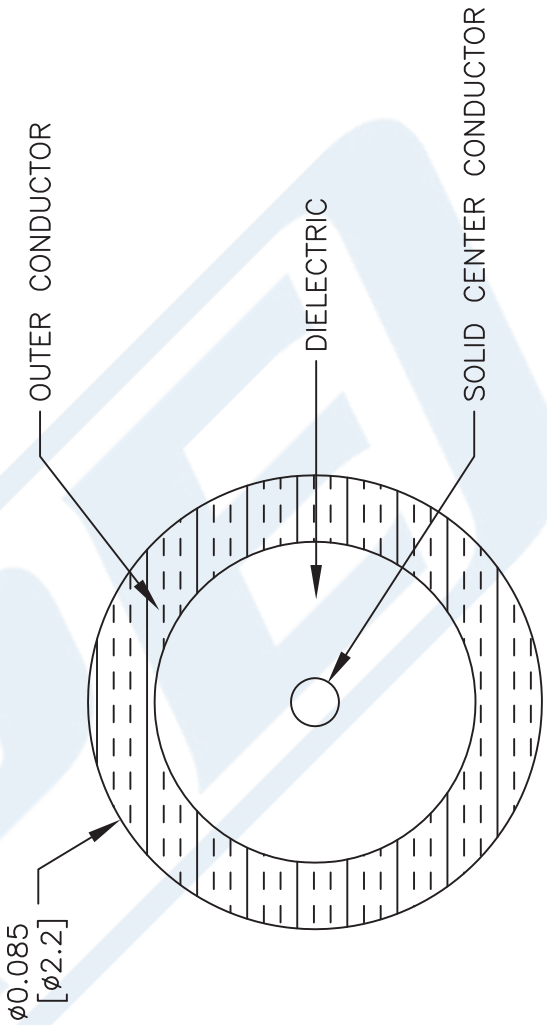
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# PE-SR405AL CAD Drawing

086 Semi-rigid Coax Cable with Tinned Aluminum Outer Conductor




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

DWG TITLE
PE-SR405AL

CAD FILE 111716 | SCALE N/A | SIZE A | 41742

FSCM NO. 53919

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