



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 ASTM-B488
Insulation	PTFE	
Body	Beryllium Copper	Gold 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](#)

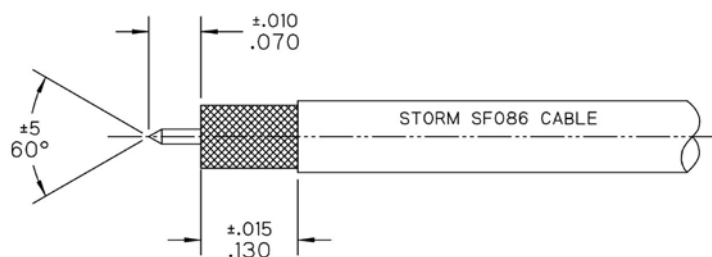


SMA Male Connector Solder Attachment for
RG405, RG405 Tinned, PE-SR405AL, PE-
SR405FL, PE-SR405FLJ, PE-SR405TN

RF Connectors Technical Data Sheet

PE45480

Assembly Instruction

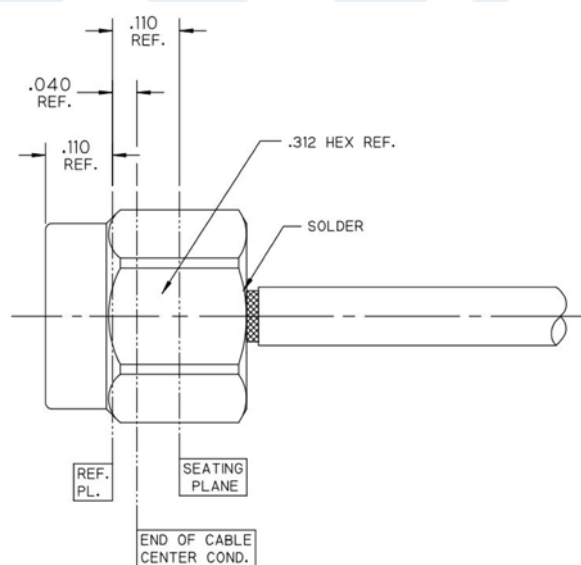


STEP 1:

- 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.

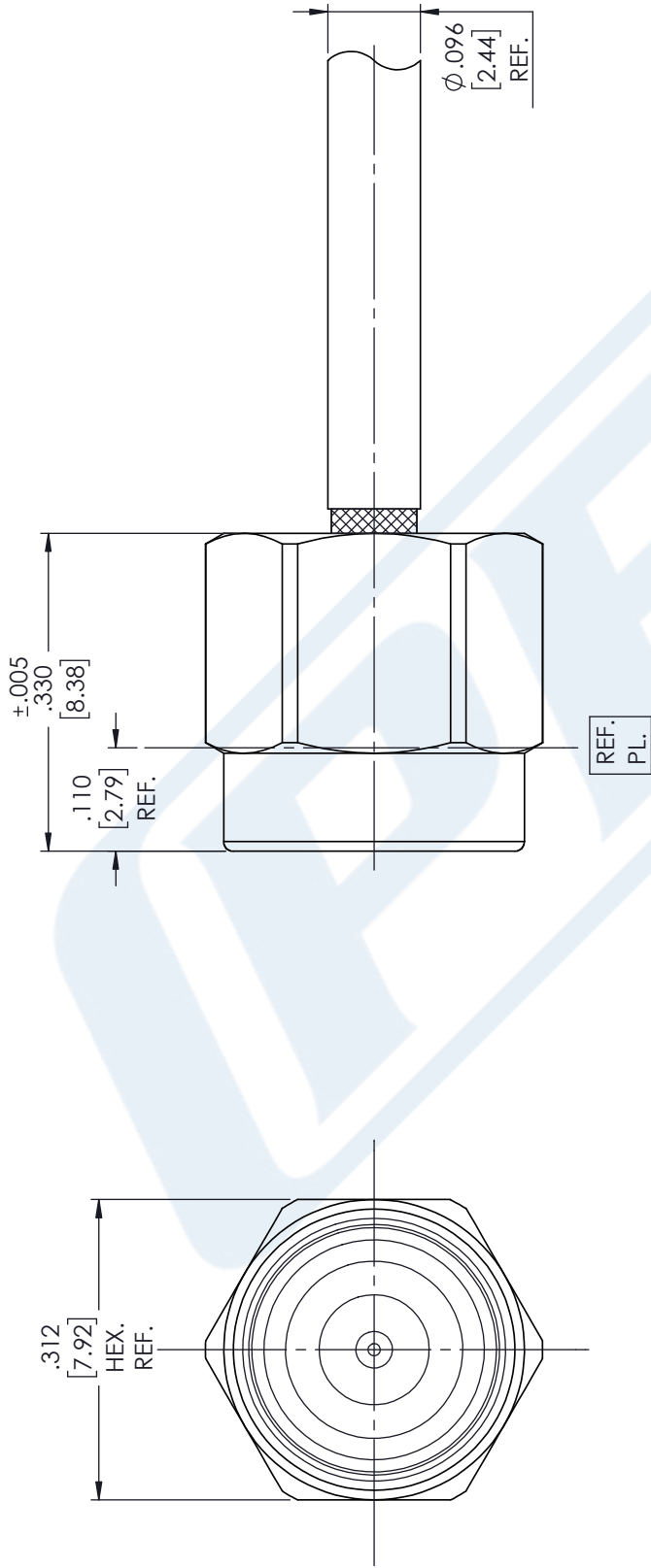
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Connector Solder Attachment for RG405, RG405 Tinned, PE-SR405AL, PE-SR405FL, PE-SR405FLJ, PE-SR405TN PE45480](https://www.pasternack.com/sma-male-rg405-rg405-tinned-connector-pe45480-p.aspx)

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



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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



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: $0.05 \times \sqrt{f(\text{GHz})}$ 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](#)



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

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>

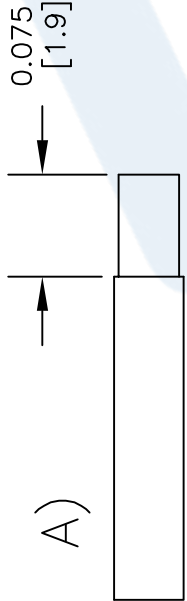
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PE44336 CAD Drawing

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

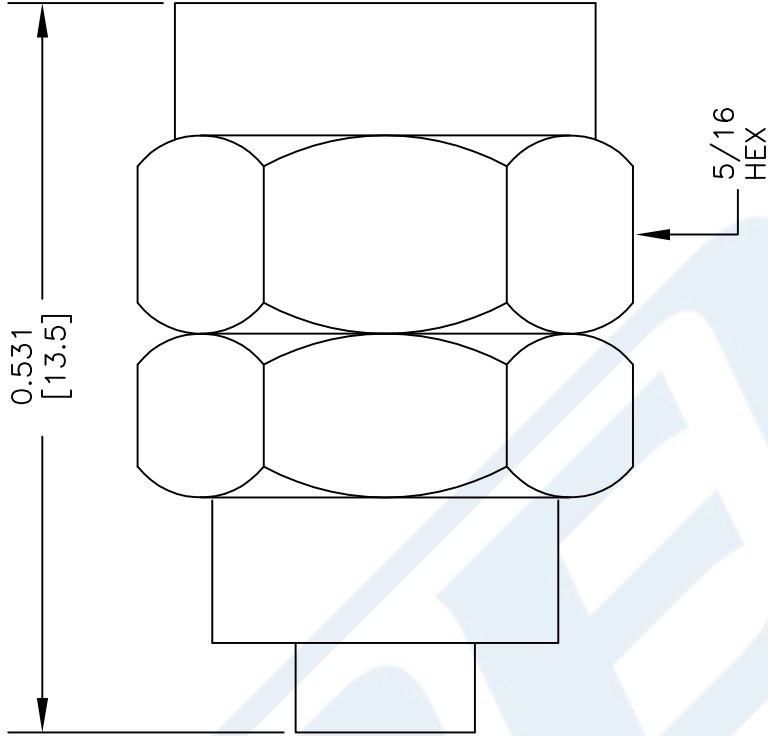
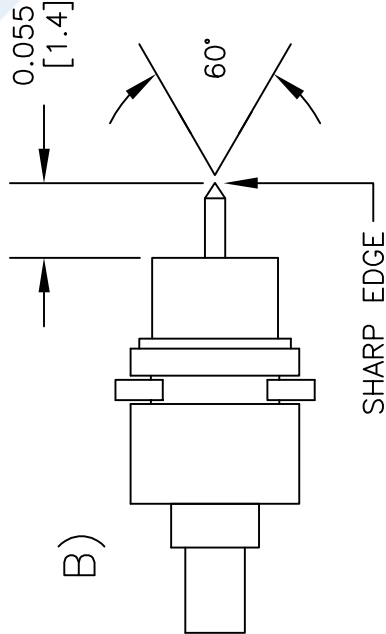
ASSEMBLY PROCEDURES

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.



DWG TITLE

PE44336

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.

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Pasternack Enterprises, Inc.

PE PASTERNAK
THE ENGINEER'S RF SOURCE

FSCM NO. 53919

CAD FILE 101414

SCALE N/A

SIZE A

150

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](#)

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.

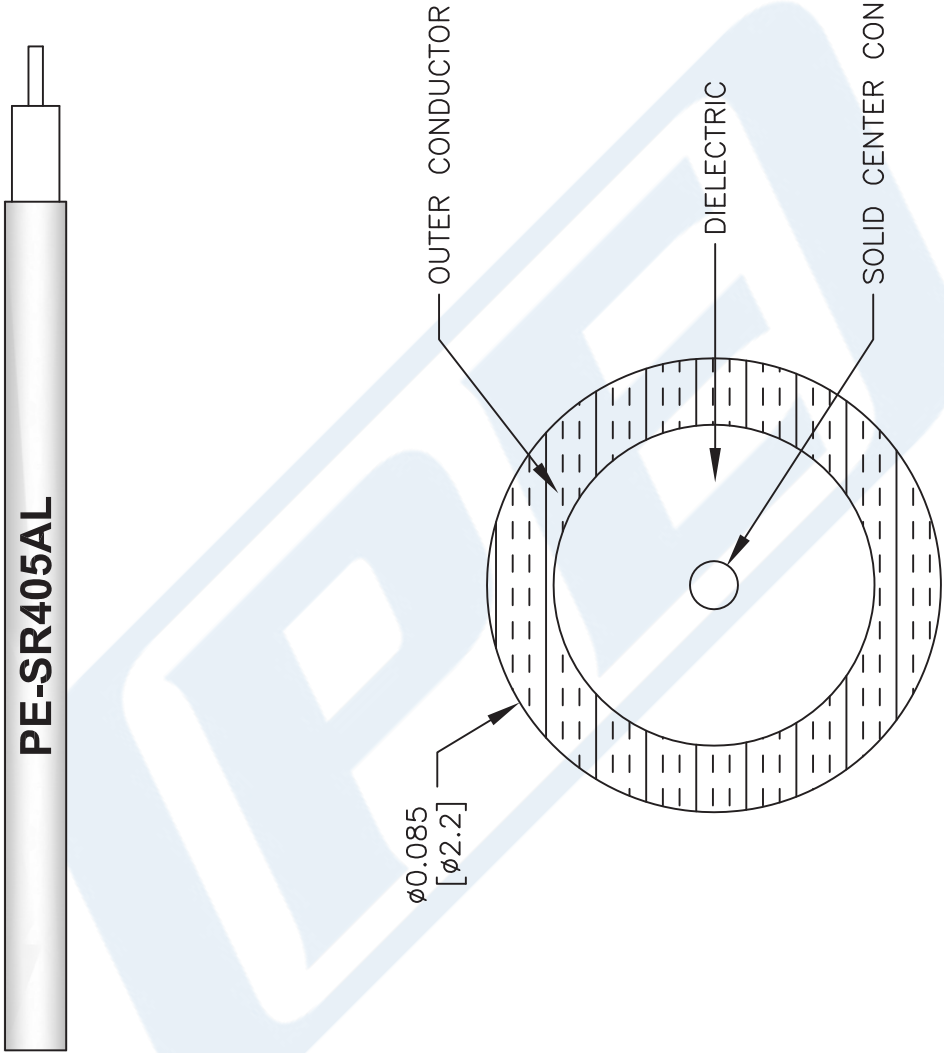
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [086 Semi-rigid Coax Cable with Tinned Aluminum Outer Conductor PE-SR405AL](#)

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

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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

SCALE N/A

SIZE A

41742

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