



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

RF Connectors Technical Data Sheet

PE44494

Configuration

- Mini SMP Female Connector
- MIL-STD-348A
- 50 Ohms
- Right Angle Body Geometry
- PE-SR405AL, PE-SR405FL, PE-SR405FLJ, PE-SR405TN, RG405 Interface Type
- Solder Attachment

Features

- Max. Operating Frequency 65 GHz
- Gold Plated Beryllium Copper Contact
- Blind Mate Connector

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

Pasternack's PE44494 Mini SMP female right angle 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 65 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. Its right angle body geometry allows for easier connections in tight spaces.

Our Mini SMP female right angle connector PE44494 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		65	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 6	6 to 12	12 to 18			GHz
VSWR, Max	1.11:1	1.23:1	1.33:1			

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 Right Angle Connector Solder Attachment for PE-SR405AL, PE-SR405FL, PE-SR405FLJ, PE-SR405TN, RG405 PE44494](#)



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

RF Connectors Technical Data Sheet

PE44494

Electrical Specification Notes:

Insertion loss = $0.05 \times \sqrt{f(\text{GHz})}$ dB max up to 18 GHz.

Mechanical Specifications

Size

Length	0.24 in [6.1 mm]
Width/Dia.	0.138 in [3.51 mm]
Height	0.24 in [6.1 mm]
Weight	0.00078 lbs [0.35 g]

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold
Insulation	PTFE	
Outer Conductor	Beryllium Copper	Gold
Body	Brass	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

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 Right Angle Connector Solder Attachment for PE-SR405AL, PE-SR405FL, PE-SR405FLJ, PE-SR405TN, RG405 PE44494](#)



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

RF Connectors Technical Data Sheet

PE44494

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

Plotted and Other Data

Notes:

Mini SMP Female Right Angle 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% availability and are part of the broadest selection in the industry.

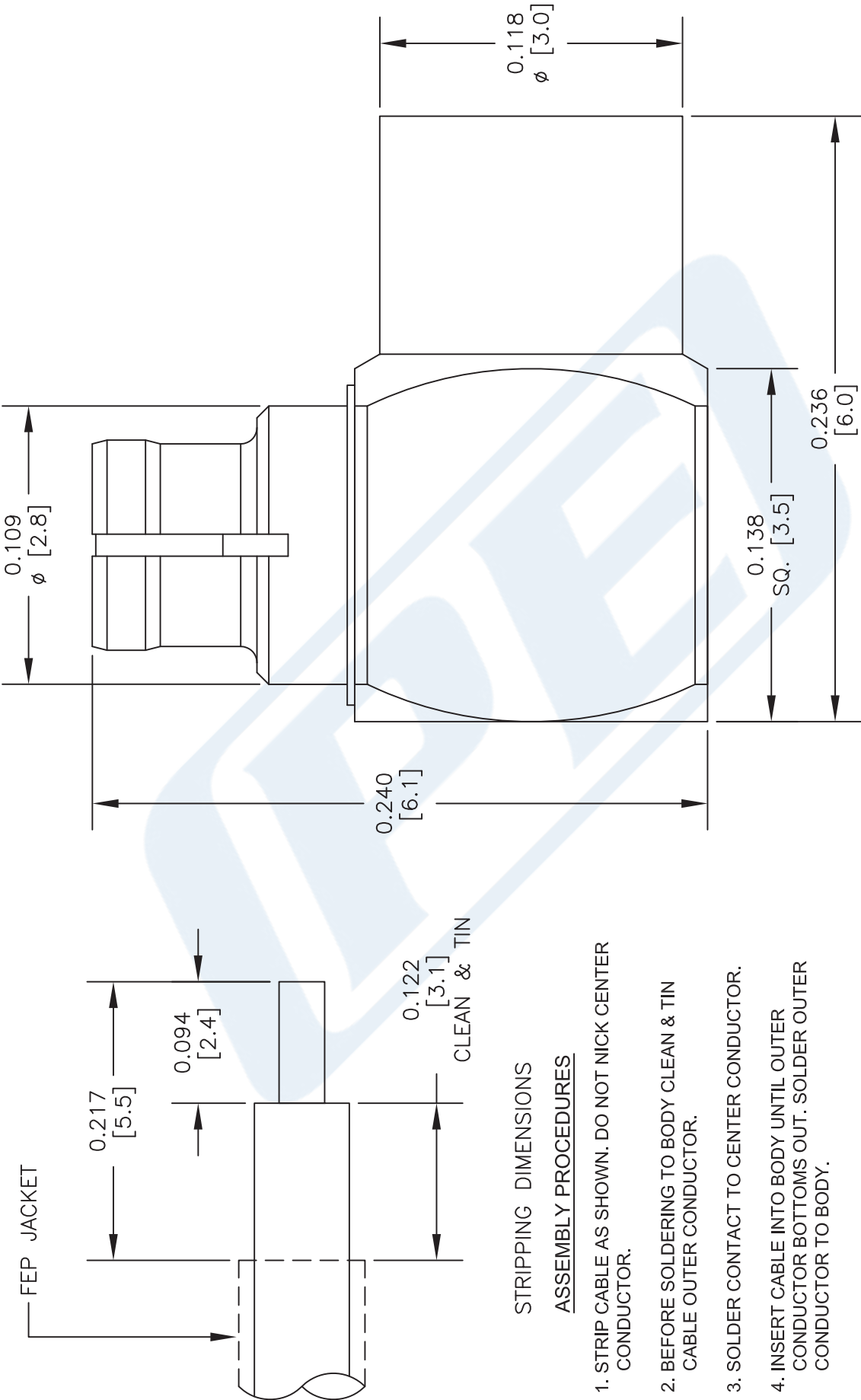
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URL: <https://www.pasternack.com/mini-smp-female-standard-pe-sr405al-pe-sr405fl-rg405-connector-pe44494-p.aspx>

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PE44494 CAD Drawing

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



STRIPPING DIMENSIONS

ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN. DO NOT NICK CENTER CONDUCTOR.
2. BEFORE SOLDERING TO BODY CLEAN & TIN CABLE OUTER CONDUCTOR.
3. SOLDER CONTACT TO CENTER CONDUCTOR.
4. INSERT CABLE INTO BODY UNTIL OUTER CONDUCTOR BOTTOMS OUT. 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

PE44494

FSCM NO. 53919

CAD FILE

081213

SCALE N/A

SIZE A

2233



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SMA Male Connector Solder Attachment for RG405, RG405 Tinned

RF Connectors Technical Data Sheet

PE45481

Configuration

- SMA Male Connector
- 50 Ohms
- Straight Body Geometry
- RG405, RG405 Tinned Interface Type
- Solder Attachment

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 PE45481 SMA male connector with solder attachment for RG405 and RG405 Tinned 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 PE45481 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 PE45481](#)



SMA Male Connector Solder Attachment for RG405, RG405 Tinned

RF Connectors Technical Data Sheet

PE45481

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 18	18 to 16.5				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 PE45481](#)

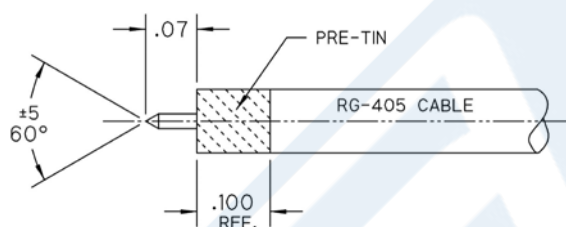


SMA Male Connector Solder Attachment for RG405, RG405 Tinned

RF Connectors Technical Data Sheet

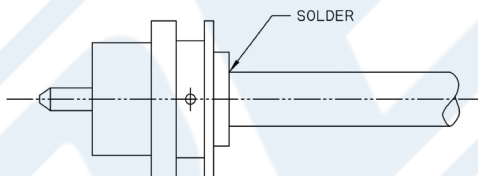
PE45481

Assembly Instruction



STEP 1:

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

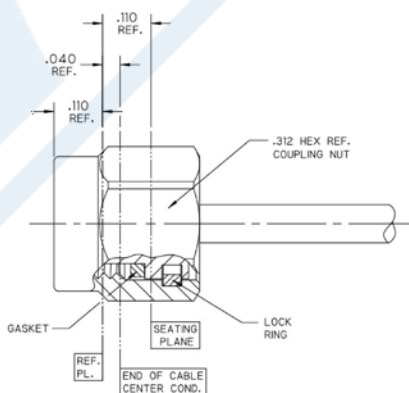


STEP 2:

- INSERT CABLE INTO CONNECTOR BODY UNTIL CENTER CONDUCTOR PLUGS IN AND CABLE FULLY SEATS IN CONNECTOR BORE.
- SOLDER CABLE TO BODY WHERE SHOWN.

STEP 3:

- INSTALL LOCK RING, GASKET, AND COUPLING NUT ONTO MAIN BODY USING APPROPRIATE SMA ASSEMBLY TOOLS.



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 PE45481](#)



SMA Male Connector Solder Attachment for RG405, RG405 Tinned

RF Connectors Technical Data Sheet

PE45481

SMA Male Connector Solder Attachment for RG405, RG405 Tinned 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.

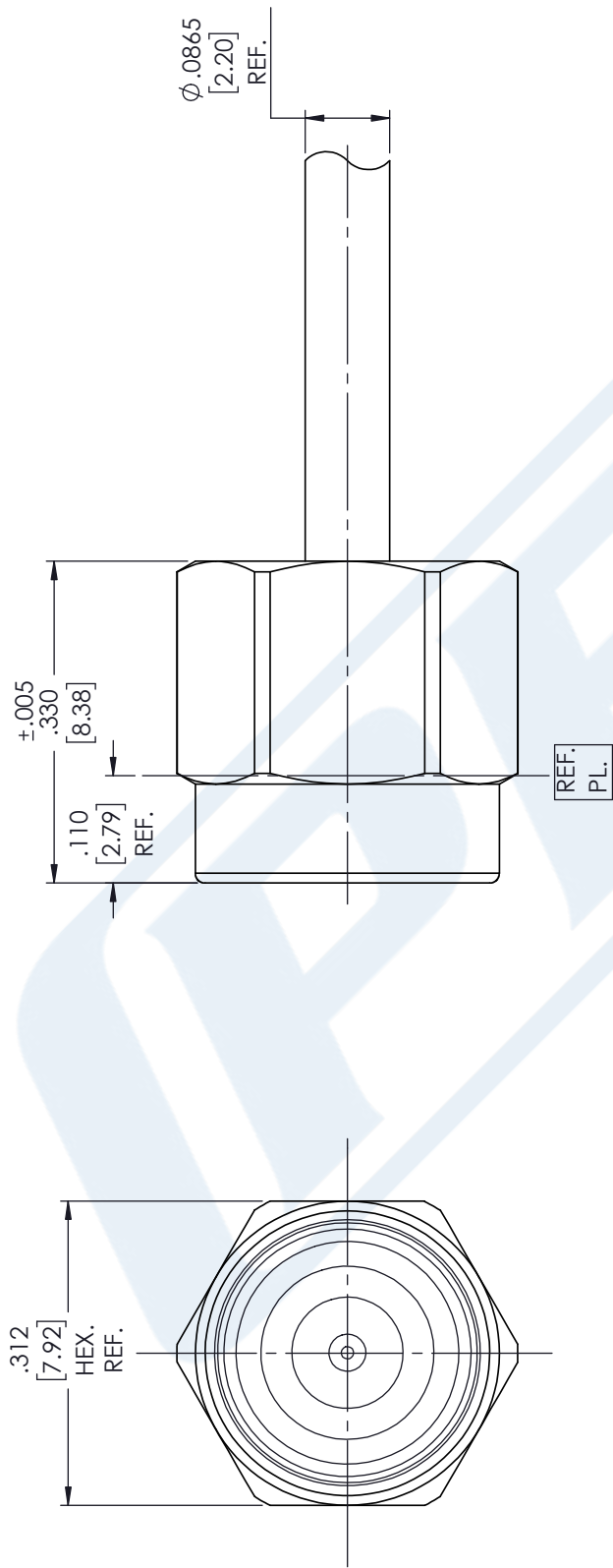
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Connector Solder Attachment for RG405, RG405 Tinned PE45481](https://www.pasternack.com/sma-male-rg405-rg405-tinned-connector-pe45481-p.aspx)

URL: <https://www.pasternack.com/sma-male-rg405-rg405-tinned-connector-pe45481-p.aspx>

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PE45481 CAD Drawing

SMA Male Connector Solder Attachment for RG405, RG405 Tinned



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

PE45481

CAGE CODE 53919

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

CAD FILE 07/26/18

SCALE N/A

SIZE A

CN2379

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.

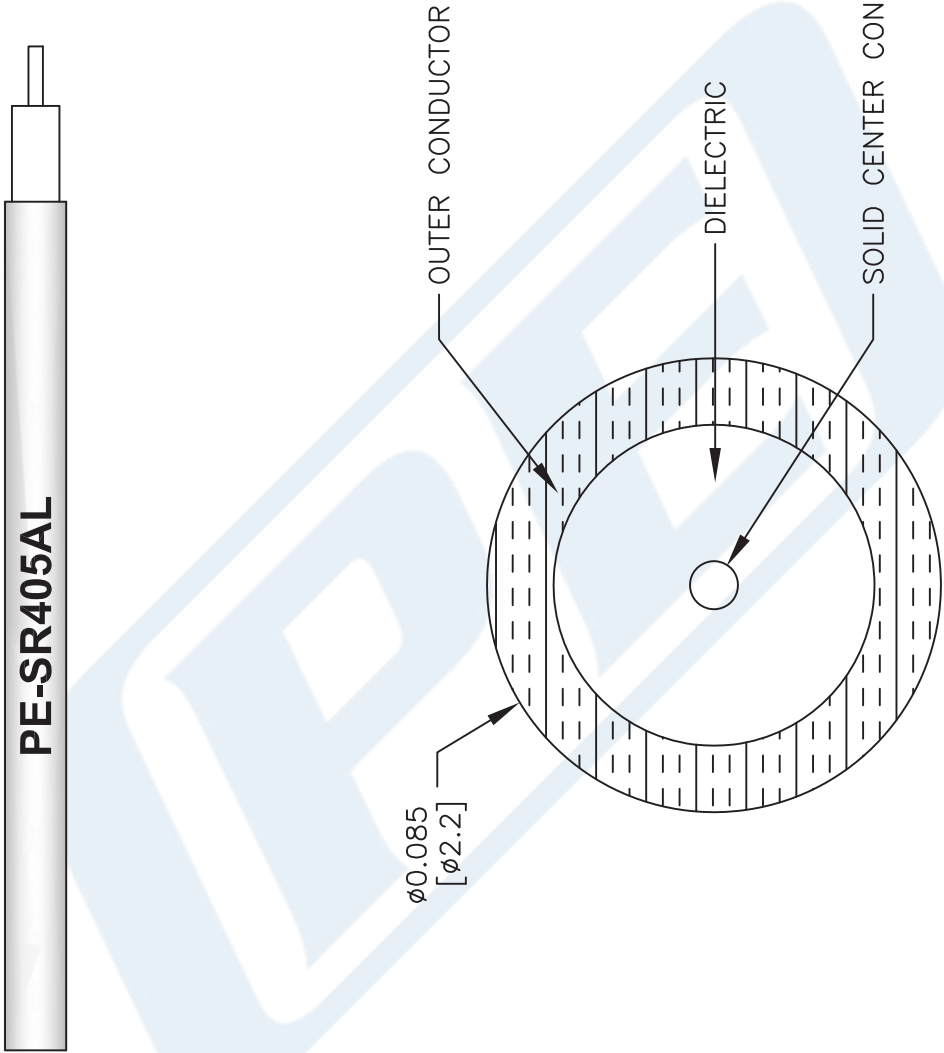
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [086 Semi-rigid Coax Cable with Tinned Aluminum Outer Conductor PE-SR405AL](#)

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

PE PASTERNAK®
THE ENGINEER'S RF SOURCE

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