PASTERNACK®
THE ENGINEER'S RF SOURCE

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

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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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

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Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

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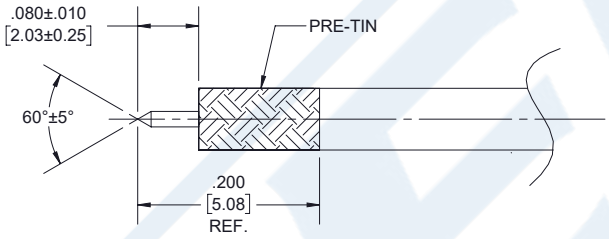
Assembly Instruction

Assembly Instructions

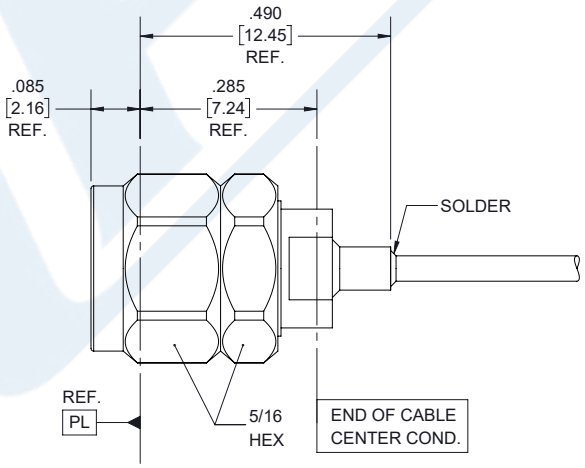


STEP 1:

- 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.



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RF Connectors Technical Data Sheet PE45414

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

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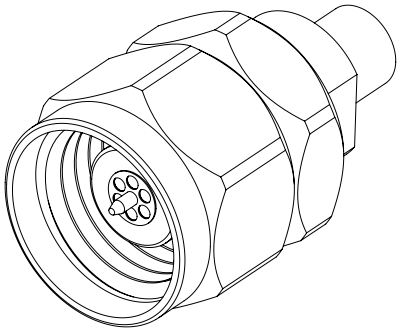
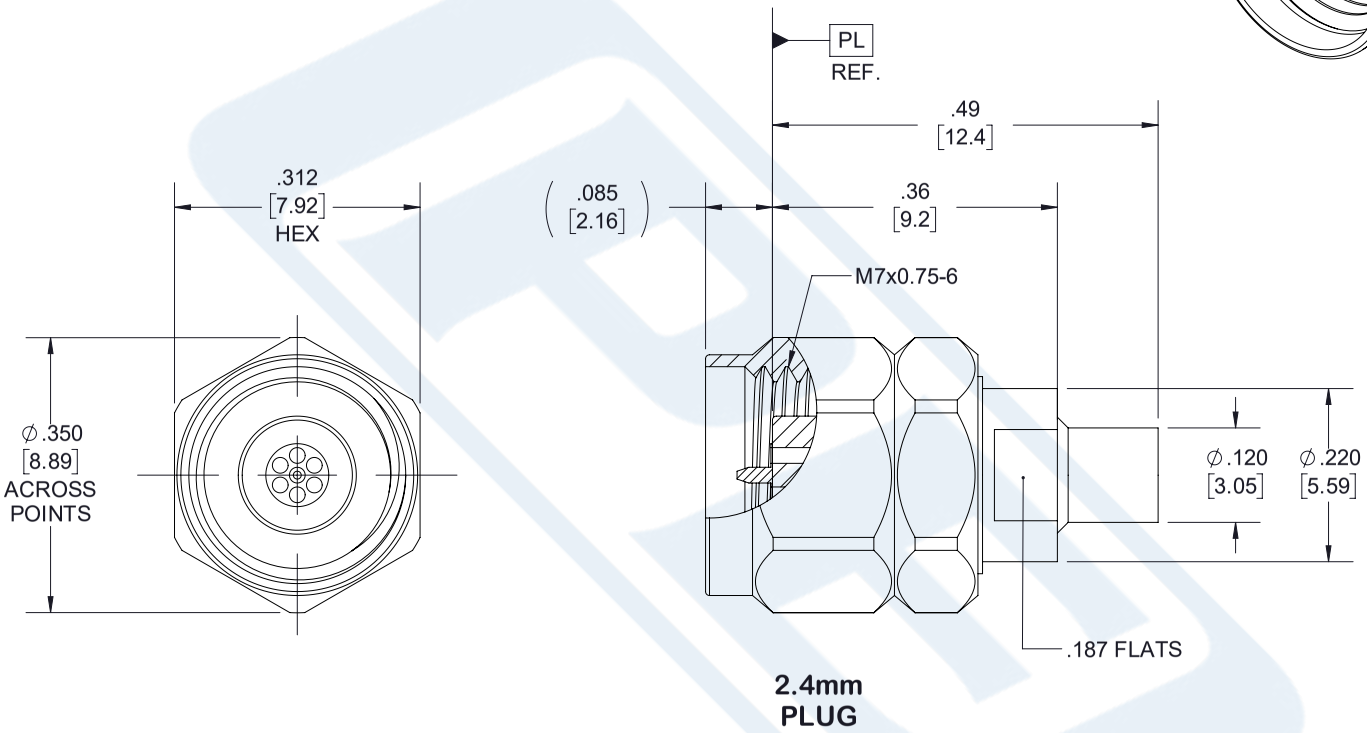
PE45414 CAD Drawing

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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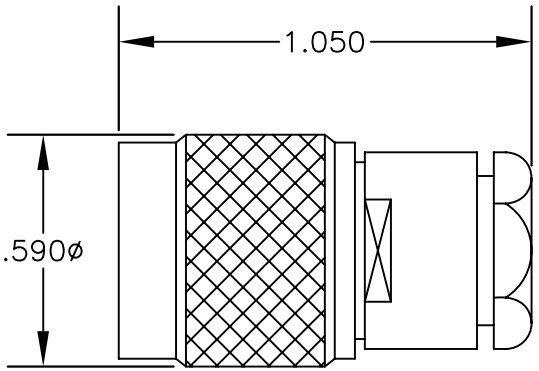
DWG TITLE

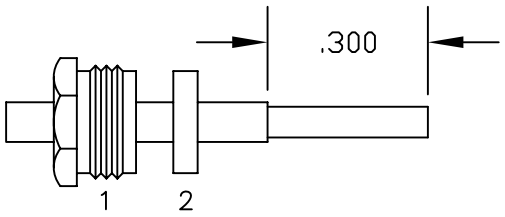
PE45414

NOTES:
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].

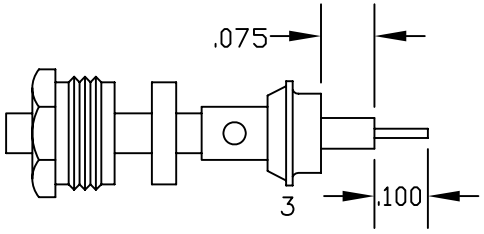
CAGE CODE 53919	CAD FILE 110217	SCALE N/A	SIZE A	7361

MATERIALS	
BODY	BRASS NICKEL PLATED
CONTACT	GOLD PLATED
INSULATOR	PTFE
SOLDER ADAPTER	BRASS GOLD PLATED





ASSEMBLY (A)



ASSEMBLY (B)

ASSEMBLY PROCEDURES

1. SLIDE CLAMP NUT (1) & GASKET (2) OVER CABLE. STRIP CABLE AS SHOWN IN ASSEMBLY (A). DO NOT CUT DIELECTRIC.
2. SLIDE ADAPTER (3) OVER CABLE UNTIL ADAPTER (3) BOTTOMS ON OUTER CONDUCTOR. SOLDER ADAPTER (3) TO OUTER CONDUCTOR USING MINIMUM HEAT.
3. STRIP CABLE AS SHOWN IN ASSEMBLY (B). SOLDER CONTACT TO CENTER CONDUCTOR. SLIDE ASSEMBLY FORWARD & TIGHTEN TO BODY.

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ESTABLISHED 1972

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COAXIAL & FIBER OPTICS

DWG TITLE **PE4142**

DES. TNC MALE, SOLDER/CLAMP ATTACHMENT FOR RG405, PE-SR405AL & PE-SR405FL

REV. -	FSCM NO. 53919	CAD FILE 042309	SCALE N/A	SIZE A	147

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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

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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:

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

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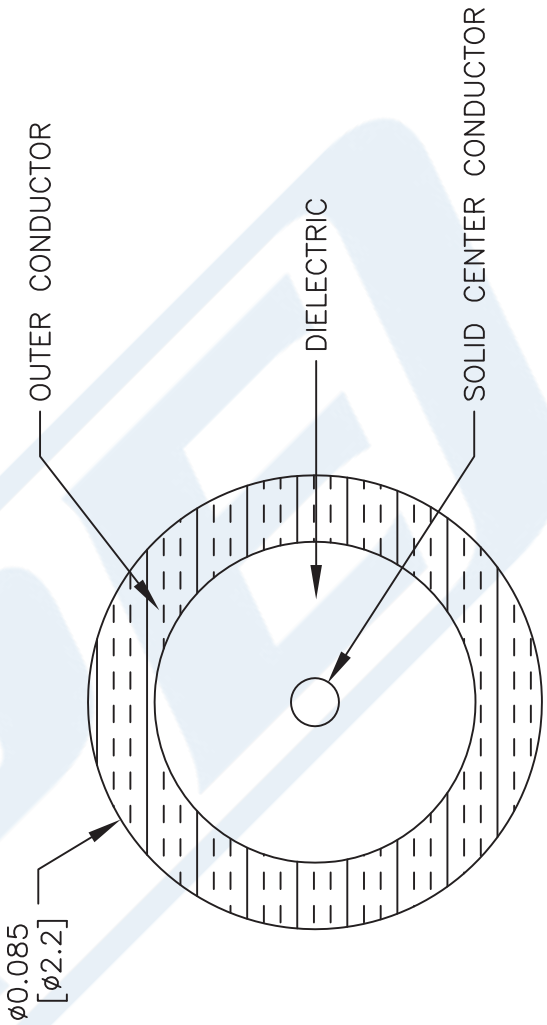
PE-SR405AL CAD Drawing

086 Semi-rigid Coax Cable with Tinned Aluminum Outer Conductor



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DWG TITLE
PE-SR405AL

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

FSCM NO. 53919

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