



## SSMC Plug Connector Crimp/Solder Attachment for LMR-100A, RG188, RG174, PE-C100- LSZH, PE-B100, LMR-100A-FR, RG316

### RF Connectors Technical Data Sheet

PE45491

#### Configuration

- SSMC Plug Connector
- 50 Ohms
- Straight Body Geometry

- LMR-100A, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, RG316 Interface Type
- Crimp/Solder Attachment

#### Features

- Max. Operating Frequency 12.4 GHz
- Good VSWR of 1.5:1
- Gold Plated Beryllium Copper Contact
- Contact plating according to MIL-G-45204
- Reliable threaded coupling

- Small SSMC connector form factor (50% smaller than SMA, radially)
- IEC 60169-20 SSMC connector interface
- In stock and ready to ship

#### Applications

- General Purpose Test
- Custom Cable Assemblies
- Avionics

- A/D Modules
- Data Acquisition
- Software defined radio (SDR)

- RADAR/SONAR
- Ultra Wideband Digital Receivers
- Medical equipment

#### Description

Pasternack's PE45491 SSMC plug connector with crimp/solder attachment for LMR-100A, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR and RG316 is part of our full line of RF components available for same-day shipping. Our SSMC plug connector operates up to a maximum frequency of 12.4 GHz and offers good VSWR of 1.5:1.

Our SSMC plug connector PE45491 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		12.4	GHz
VSWR			1.5:1	
Insertion Loss			0.3	dB
Operating Voltage (AC)			250	Vrms
High Potential Voltage 5 MHz			400	Vrms
Inner Conductor DC Resistance			4	mOhms
Outer Conductor DC Resistance			1	mOhms
Insulation Resistance	1,000			MOhms
RF Leakage	-50			dB

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SSMC Plug Connector Crimp/Solder Attachment for LMR-100A, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, RG316 PE45491](#)



SSMC Plug Connector Crimp/Solder Attachment  
for LMR-100A, RG188, RG174, PE-C100-  
LSZH, PE-B100, LMR-100A-FR, RG316

RF Connectors  
Technical Data Sheet

PE45491

**Mechanical Specifications**

**Size**

Length

0.7 in [17.78 mm]

Width/Dia.

0.156 in [3.96 mm]

Mating Cycles

500 Cycles

Mating Torque

1.75 to 2 in-lbs [0.20 to 0.23 Nm]

**Material Specifications**

Description	Material	Plating
Contact	Beryllium Copper	Gold MIL-G-45204
Insulation	Teflon	
Body	Beryllium Copper	Gold MIL-G-45204
Coupling Nut	Beryllium Copper	Gold MIL-G-45206
Crimp Sleeve	Brass	Gold MIL-G-45204

**Environmental Specifications**

**Temperature**

Operating Range

-65 to +165 deg C

Shock

Method 213, Condition B, 75G @6ms @1/2 sine

Vibration

Method 204, Condition D (20G)

Salt Spray

Method 101, Condition B, 5% salt solution

**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: [SSMC Plug Connector Crimp/Solder Attachment for LMR-100A, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, RG316 PE45491](#)



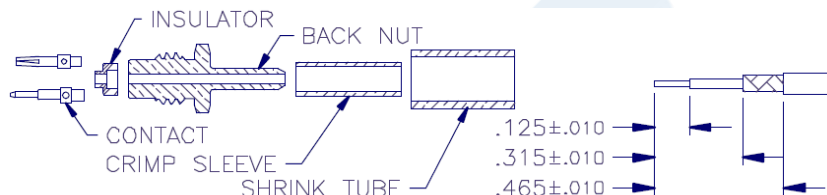
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## RF Connectors Technical Data Sheet

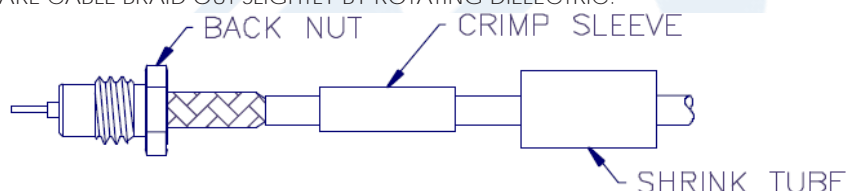
PE45491

### Assembly Instruction

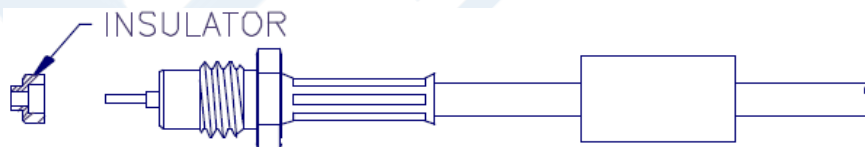
#### Assembly Instructions



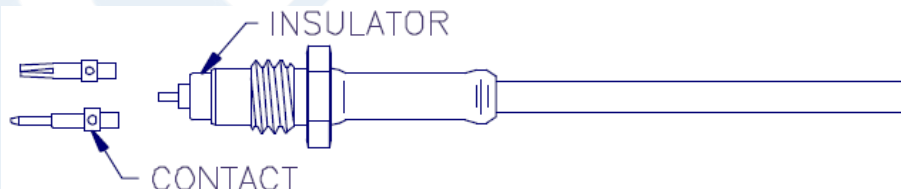
1. TRIM CABLE AS SHOWN ABOVE. TIN END OF CENTER CONDUCTOR.
2. SLIDE CRIMP SLEEVE AND SHRINK TUBE (IF SUPPLIED) OVER CABLE JACKET.
3. FLARE CABLE BRAID OUT SLIGHTLY BY ROTATING DIELECTRIC.



4. INSERT CABLE INTO TAIL-END OF BACK NUT, MAKING SURE TAIL GOES OVER DIELECTRIC AND UNDER BRAID. SLIDE IN UNTIL BRAID TOUCHES REAR SURFACE OF NUT.
5. SLIDE CRIMP SLEEVE FORWARD AND USE .105 HEX DIE TO CRIMP.



6. POSITION INSULATOR OVER CABLE DIELECTRIC AND CENTER CONDUCTOR.



7. SOLDER CONTACT TO CENTER CONDUCTOR.
8. INSERT CABLE ASSEMBLY INTO BODY AND TIGHTEN NUT WITH A TORQUE WRENCH WITH A TORQUE OF 35-45 INCH-OUNCES.
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for LMR-100A, RG188, RG174, PE-C100-  
LSZH, PE-B100, LMR-100A-FR, RG316

RF Connectors  
Technical Data Sheet

PE45491

SSMC Plug Connector Crimp/Solder Attachment for LMR-100A, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, RG316 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.

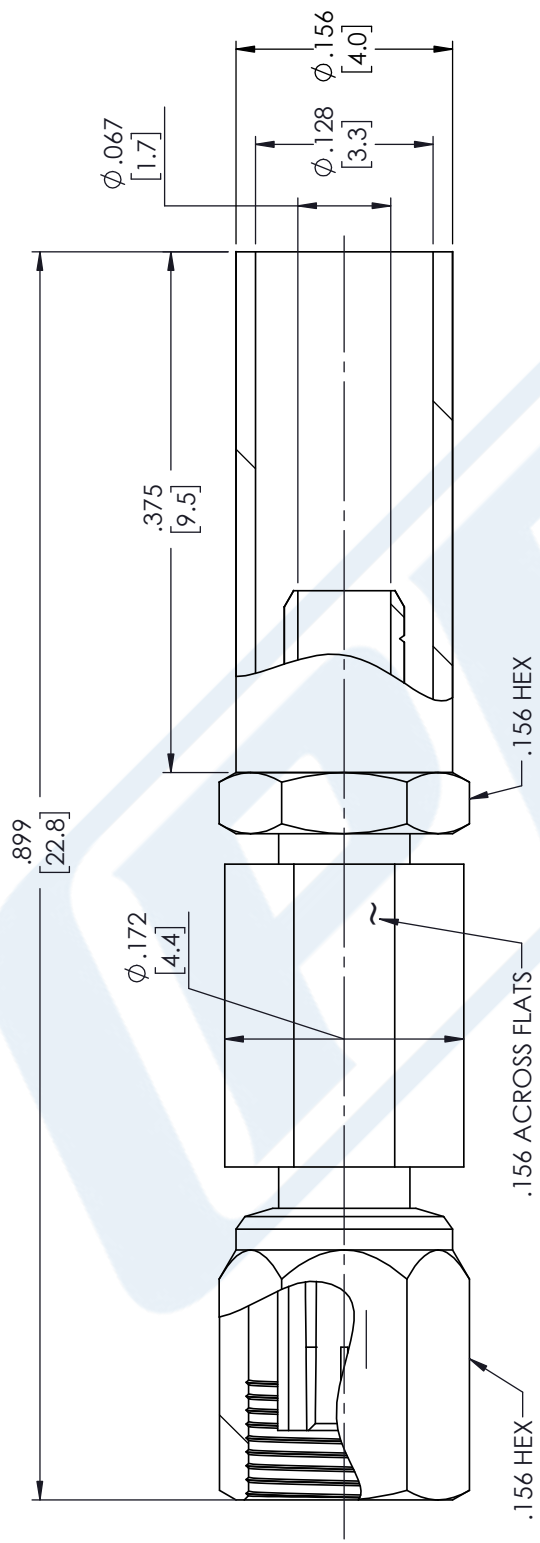
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URL: <https://www.pasternack.com/ssmc-plug-lmr-100a-rg188-pe-c100-lszh-pe-b100-connector-pe45491-p.aspx>

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PE45491 CAD Drawing

SSMC Plug Connector Crimp/Solder Attachment for LMR-100A, RG188,  
RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, RG316



STANDARD TOLERANCES
.X $\pm 0.2$
.XX $\pm 0.01$
.XXX $\pm 0.005$

\*STANDARD TOLERANCES APPLY  
ONLY TO DIMENSIONS IN INCHES



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DWG TITLE  
PE45368

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 08/09/18

SCALE N/A

SIZE A

CN2245



## SSMC Plug Connector Crimp/Solder Attachment for LMR-100A, RG188, RG174, PE-C100- LSZH, PE-B100, LMR-100A-FR, RG316

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for LMR-100A, RG188, RG174, PE-C100-  
LSZH, PE-B100, LMR-100A-FR, RG316

RF Connectors  
Technical Data Sheet

PE45491

**Mechanical Specifications**

**Size**

Length

0.7 in [17.78 mm]

Width/Dia.

0.156 in [3.96 mm]

Mating Cycles

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**Material Specifications**

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**Environmental Specifications**

**Temperature**

Operating Range

-65 to +165 deg C

Shock

Method 213, Condition B, 75G @6ms @1/2 sine

Vibration

Method 204, Condition D (20G)

Salt Spray

Method 101, Condition B, 5% salt solution

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

**Plotted and Other Data**

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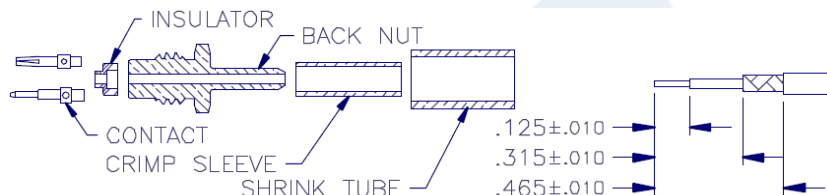
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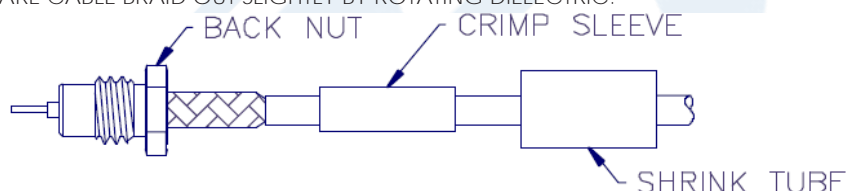
PE45491

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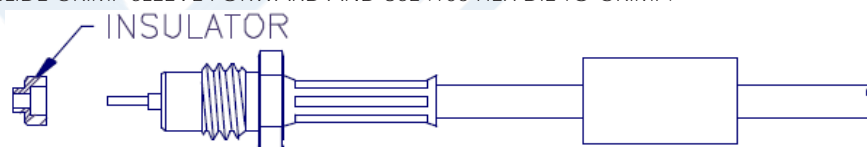
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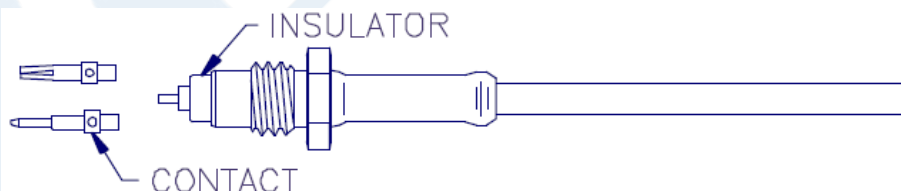
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### RF Connectors Technical Data Sheet

PE45491

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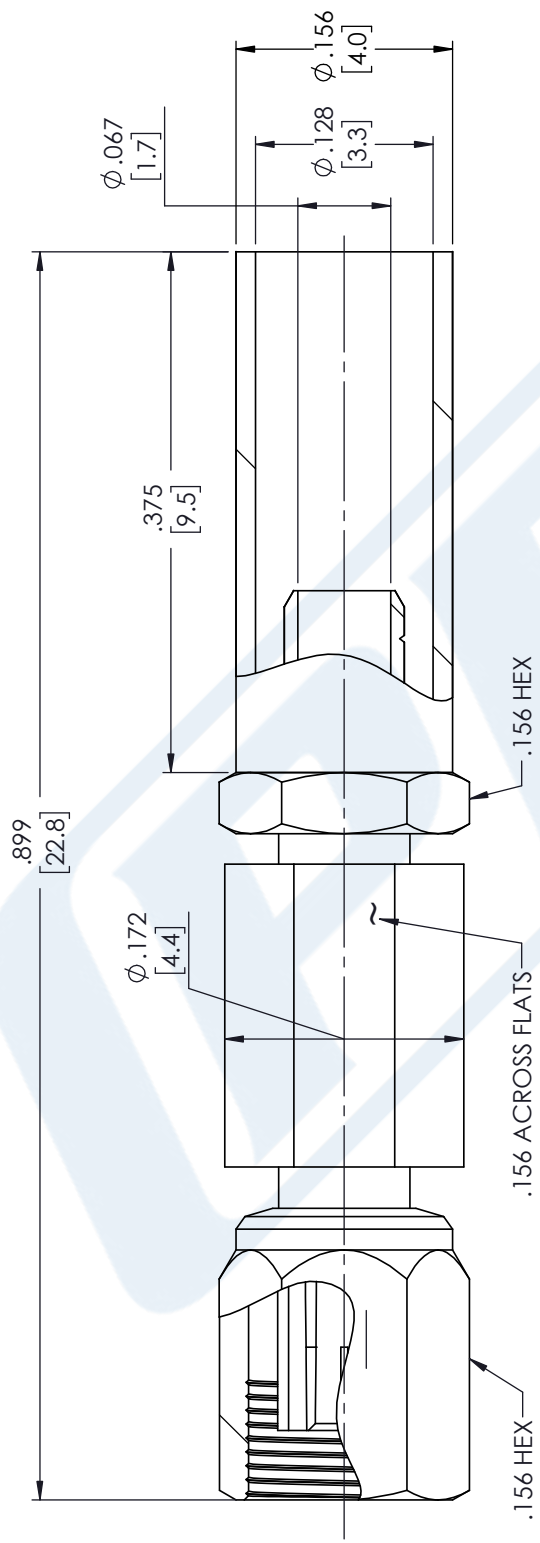
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PE45491 CAD Drawing

SSMC Plug Connector Crimp/Solder Attachment for LMR-100A, RG188,  
RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, RG316



STANDARD TOLERANCES
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.XX $\pm 0.01$
.XXX $\pm 0.005$

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DWG TITLE  
PE45368

CAGE CODE 53919

NOTES:  
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CAD FILE 08/09/18

SCALE N/A

SIZE A

CN2245

Flexible RG174 Coax Cable Single  
Shielded with Black PVC Jacket

RF Cables  
Technical Data Sheet

**Times Microwave Systems Coax Cable Specification**  
**Configuration**

- Flexible Cable
- 1 Shield(s)

**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		1,000	MHz
Impedance		50		Ohms
Velocity of Propagation		66		%
Nominal Capacitance		31.08 [101.97]		pF/ft [pF/m]

**Performance by Frequency Band**

Description	F1	F2	F3	F4	F5	Units
Frequency	100	400	1,000			MHz
Attenuation, Typ	8.4	19	32			dB/100ft
	27.56	62.34	104.99			dB/100m

**Mechanical Specifications**

Diameter	0.11 in [2.79 mm]
Weight	0.009 lbs/ft [0.01 Kg/m]

**Construction Specifications**

Description	Material and Plating	Diameter
Inner Conductor	Copper Clad Steel, 7 Strands	0.019 in [0.48 mm]
Conductor Type	Stranded	
Dielectric	PE	0.06 in [1.52 mm]
First Shield	Tinned Copper Braid	0.078 in [1.98 mm]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG174 Coax Cable Single Shielded with Black PVC Jacket RG174A/U](#)

## Flexible RG174 Coax Cable Single Shielded with Black PVC Jacket

### RF Cables Technical Data Sheet



RG174A/U

Jacket	PVC, Black	0.11 in [2.79 mm]
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#### Environmental Specifications

##### Temperature

Operating Range

-40 to +80 deg C

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

#### Plotted and Other Data

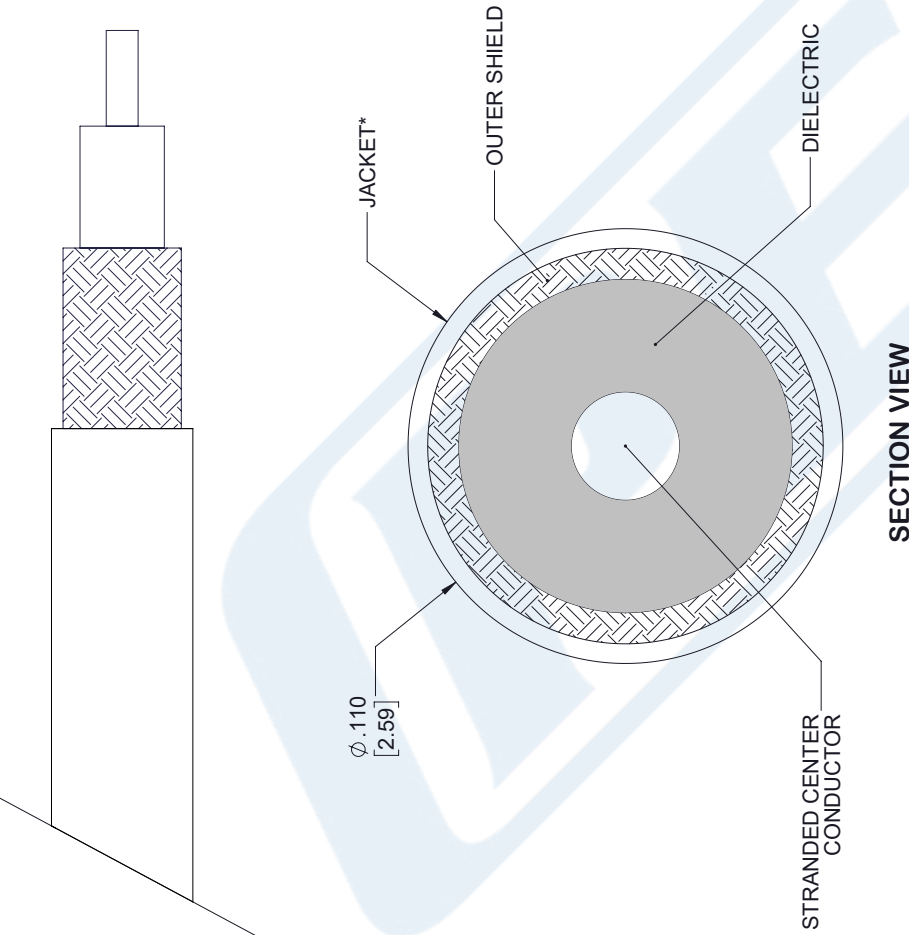
Notes:

Flexible RG174 Coax Cable Single Shielded with Black PVC Jacket 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: [Flexible RG174 Coax Cable Single Shielded with Black PVC Jacket RG174A/U](#)

URL: <https://www.pasternack.com/flexible-0.100-rg174-50-ohm-coax-cable-pvc-jacket-rg174a-u-p.aspx>

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

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THE ENGINEER'S RF SOURCE  
Pasternack Enterprises, Inc.  
P.O. Box 16759 | Irvine | CA | 92623  
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**Website:** [www.pasternack.com](http://www.pasternack.com) | **E-Mail:** [sales@pasternack.com](mailto:sales@pasternack.com)

DWG TITLE	RG174A/U
CAGE CODE	53919

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