



# SMA Female Connector Crimp/Solder Attachment for RG316, RG174, LMR-100

## RF Connectors Technical Data Sheet

PE45137

### Configuration

- SMA Female Connector
- MIL-STD-348A
- 50 Ohms
- Straight Body Geometry
- RG316, RG174, LMR-100 Interface Type
- Crimp/Solder Attachment

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
VSWR			1.3:1	
Operating Voltage (AC)			335	Vrms

### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 3					GHz
VSWR, Max	1.21:1					

### Mechanical Specifications

<b>Size</b>	
Length	0.591 in [15.01 mm]
Width/Dia.	0.25 in [6.35 mm]
Weight	0.013 lbs [5.9 g]

### Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold 50µ in. minimum
Insulation	Teflon	
Outer Conductor	Brass	Gold 3µ in. minimum
Body	Brass	Gold 3µ in. minimum

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Female Connector Crimp/Solder Attachment for RG316, RG174, LMR-100 PE45137](#)



## SMA Female Connector Crimp/Solder Attachment for RG316, RG174, LMR-100

### RF Connectors Technical Data Sheet

PE45137

#### Environmental Specifications

##### Temperature

Operating Range -65 to 165 deg C

#### Compliance Certifications (visit [www.Pasternack.com](http://www.Pasternack.com) for current document)

RoHS Compliant

REACH Compliant

12/17/2014

#### Plotted and Other Data

Notes:

SMA Female Connector Crimp/Solder Attachment for RG316, RG174, LMR-100 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.

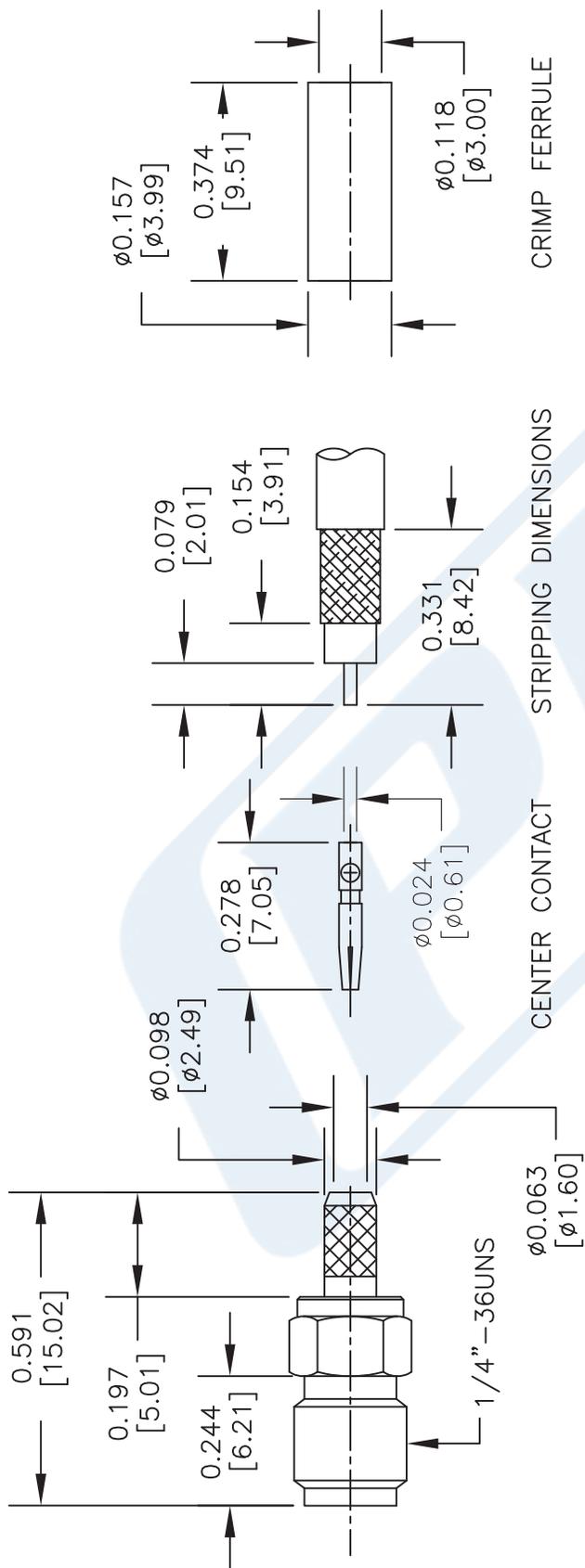
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URL: <http://www.pasternack.com/sma-female-rg316-rg174-lmr-100-connector-pe45137-p.aspx>

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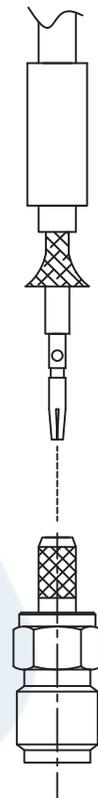
# PE45137 CAD Drawing

SMA Female Connector Crimp/Solder Attachment for RG316, RG174, LMR-100



## ASSEMBLY PROCEDURES

1. STRIP CABLE TO THE DIMENSIONS SHOWN, DO NOT NICK CENTER CONDUCTOR OR BRAID.
2. SLIDE FERRULE ONTO CABLE.
3. PUSH CENTER CONDUCTOR FULLY INTO CONTACT AND SOLDER, REMOVE ANY EXCESS SOLDER.
4. FLARE BRAID AND INSERT CONTACT INTO THE BODY UNTIL IT SEATS.
5. SLIDE FERRULE OVER BRAID AND CRIMP WITH .138" [3.5] HEX. CRIMP TOOL.



DWG TITLE

**PE45137**

- 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].

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FSCM NO. 53919

CAD FILE 021215

SCALE N/A

SIZE A

200



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

## RF Connectors Technical Data Sheet

PE45497

### Configuration

- SSMC Plug Connector
- 50 Ohms
- Right Angle Body Geometry
- RG316, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, LMR-100A Interface Type
- Crimp/Solder Attachment

### Features

- Max. Operating Frequency 12.4 GHz
- Good VSWR of 1.62:1
- 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 PE45497 SSMC plug right angle connector with crimp/solder attachment for RG316, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR and LMR-100A 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 1.62:1. Its right angle body geometry allows for easier connections in tight spaces.

Our SSMC plug right angle connector PE45497 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			1.62:1	
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 Right Angle Connector Crimp/Solder Attachment for RG316, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, LMR-100A PE45497](#)



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

RF Connectors  
 Technical Data Sheet

PE45497

**Mechanical Specifications**

**Size**

Length 0.421 in [10.69 mm]  
 Width/Dia. 0.156 in [3.96 mm]  
 Height 0.33 in [8.38 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	Brass	Gold MIL-G-45204
Coupling Nut	Beryllium Copper	Gold MIL-G-45204
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 Right Angle Connector Crimp/Solder Attachment for RG316, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, LMR-100A PE45497](#)



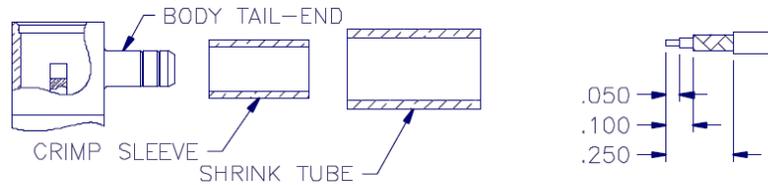
SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, LMR-100A

RF Connectors  
Technical Data Sheet

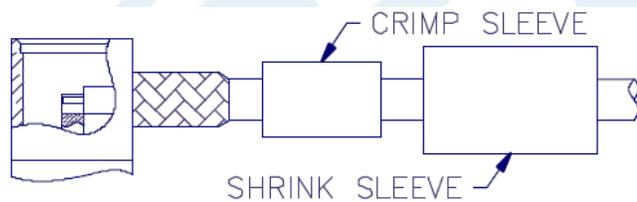
PE45497

Assembly Instruction

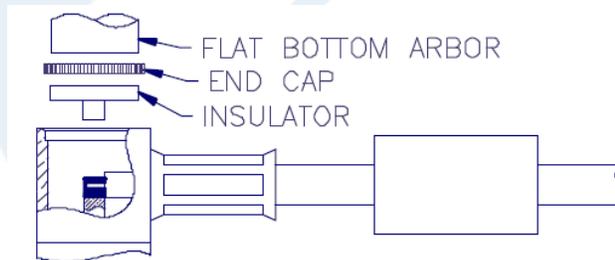
Assembly Instructions



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 ASSEMBLY INTO BODY TAIL-END MAKING SURE TAIL GOES OVER DIELECTRIC AND UNDER BRAID. SLIDE IN UNTIL BRAID TOUCHES REAR SURFACE OF BODY.
5. SLIDE CRIMP SLEEVE FORWARD AND USE .105 HEX DIE TO CRIMP SLEEVE TO BRAID.



6. SOLDER CENTER CONDUCTOR OF CABLE TO CONTACT.
7. PLACE INSULATOR AND END CAP INTO CONNECTOR BODY AS SHOWN AND USE A .185" DIAMETER FLAT BOTTOM PUNCH TO PRESS CAP IN PLACE. CAP MUST BE BELOW SURFACE TO SEAT PROPERLY.
8. SLIDE SHRINK TUBE (IF SUPPLIED) OVER CRIMP SLEEVE AND SHRINK TO FIT.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, LMR-100A PE45497](#)



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

RF Connectors  
Technical Data Sheet

PE45497

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

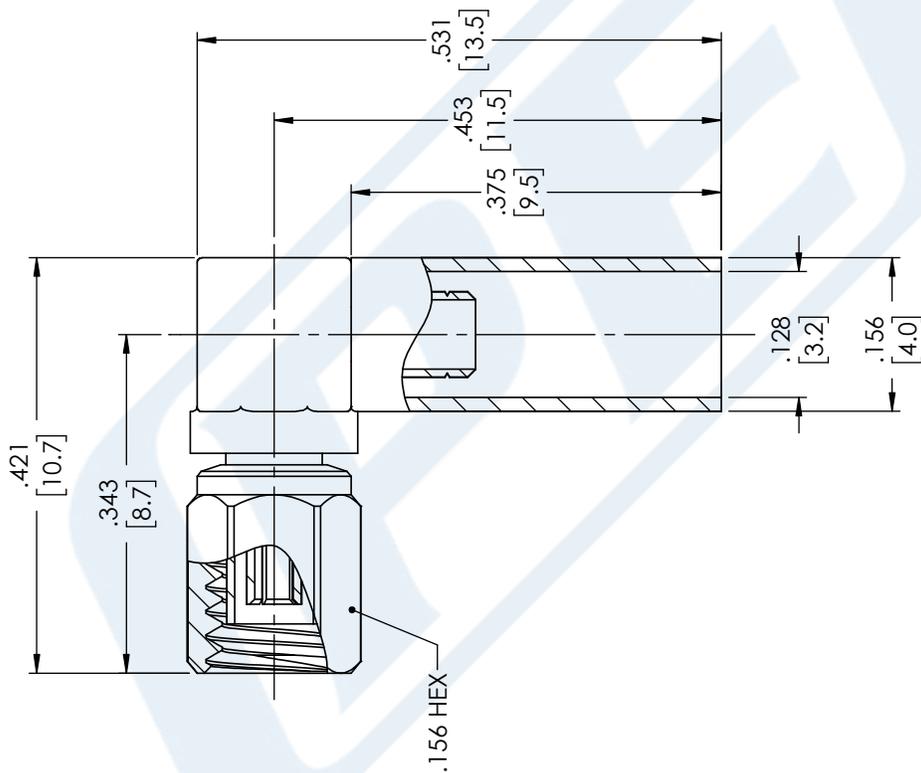
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# PE45497 CAD Drawing

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



### STANDARD TOLERANCES

.X ±0.2  
.XX ±0.01  
.XXX ±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES



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DWG TITLE

PE45497

CAGE CODE 53919

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CAD FILE 08/13/18

SCALE N/A

SIZE A

CN2245

# Low Loss Flexible RG174 Type Coax Cable Double Shielded with Black LSZH Jacket

## RF Cables Technical Data Sheet

PE-C100-LSZH

### Configuration

Low Loss Flexible Cable  
2 Number of Shields

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5	GHz
Cutoff Frequency		41		GHz
Impedance		50		Ohms
Velocity of Propagation		66		%
Shielding Effectiveness	90			dB
Operating Voltage (AC)			500	Vrms
Jacket Spark			2,000	Vrms
Nominal Capacitance		30.8 [101.05]		pF/ft [pF/m]
Nominal Inductance		0.077 [0.25]		uH/ft [uH/m]

### Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	30	50	150	220	450	MHz
Attenuation, Typ	3.9	5.1	8.9	10.9	15.8	dB/100ft
	12.8	16.73	29.2	35.76	51.84	dB/100m
Input Power (CW), Max	230	180	100	80	60	Watts

Description	F6	F7	F8	F9	F10	Units
Frequency	0.7	1.5	1.8	2.5	5	GHz
Attenuation, Typ	20.1	30.5	33.5	40.5	60	dB/100ft
	65.94	100.07	109.91	132.87	196.85	dB/100m
Input Power (CW), Max	40	40	40	40	10	Watts

### Mechanical Specifications

Diameter 0.109 in [2.77 mm]  
 Weight 0.014 lbs/ft [0.02 Kg/m]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low Loss Flexible RG174 Type Coax Cable Double Shielded with Black LSZH Jacket PE-C100-LSZH](#)



Low Loss Flexible RG174 Type Coax Cable  
Double Shielded with Black LSZH Jacket

RF Cables Technical Data Sheet

PE-C100-LSZH

Min. Bend Radius (Installation)	0.25 in [6.35 mm]
Min. Bend Radius (Repeated)	1 in [25.4 mm]
Bending Moment	0.1 lbs/ft [0.15 Kg/m]
Tensile Strength	15 lbs [6.8 Kg]
Flat Plate Crush	10 lbs/in [0.18 Kg/mm]

**Construction Specifications**

Description	Material and Plating	Diameter
Inner Conductor	Copper Clad Steel, 1 Strands	0.018in [0.46 mm]
Dielectric	PE	0.059 in [1.5 mm]
First Shield	Aluminum Tape	
Second Shield	Tinned Copper Braid	
Jacket	LSZH, Black	0.109 in [2.77 mm]

**Environmental Specifications**

**Temperature**

Operating Range	-40 to 85 deg C
Storage Range	-40 to 85 deg C

**Compliance Certifications** (visit [www.Pasternack.com](http://www.Pasternack.com) for current document)

RoHS Compliant	
REACH Compliant	12/17/2014

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low Loss Flexible RG174 Type Coax Cable Double Shielded with Black LSZH Jacket PE-C100-LSZH](#)

## Low Loss Flexible RG174 Type Coax Cable Double Shielded with Black LSZH Jacket

### RF Cables Technical Data Sheet

PE-C100-LSZH

#### Plotted and Other Data

##### Notes:

Low Loss Flexible RG174 Type Coax Cable Double Shielded with Black LSZH Jacket 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.

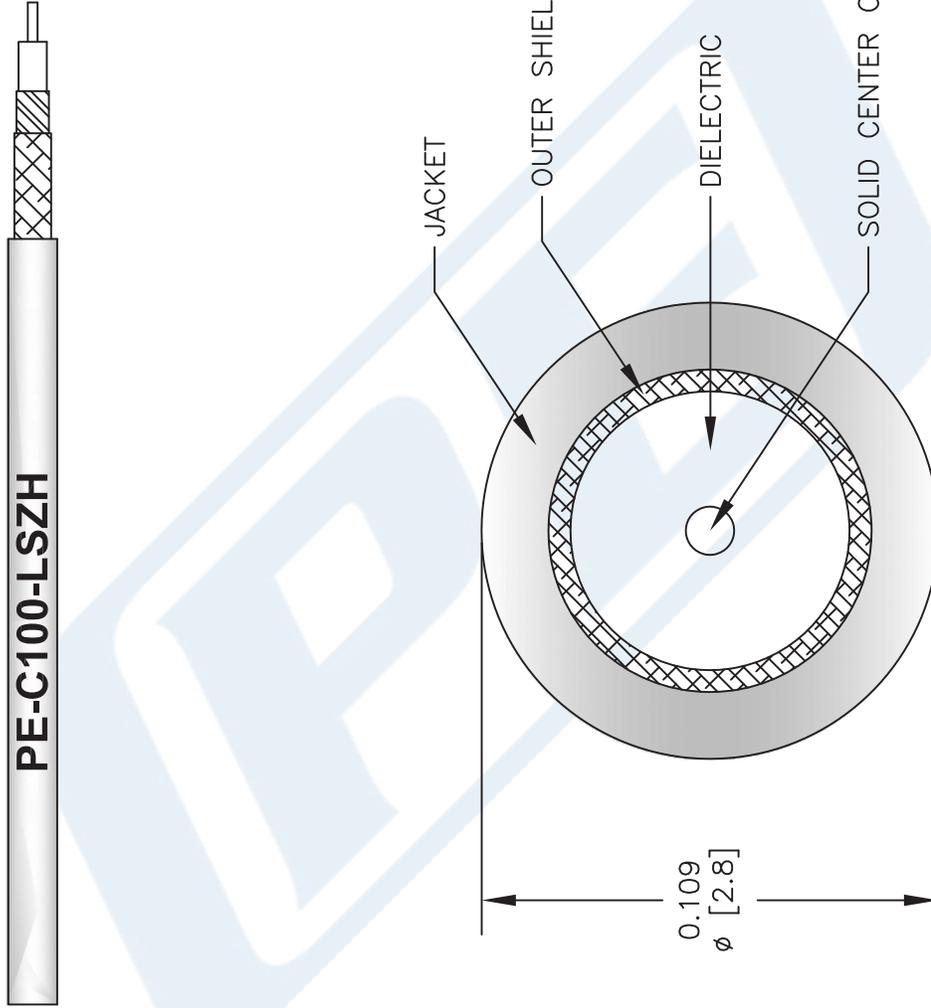
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URL: <http://www.pasternack.com/50-ohm-low-loss-lszhjacket-aluminmtape-over-tinnedcopperbraid-outerconductor-double-shieldedpe-c100-lszh-p.aspx>

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# PE-C100-LSZH CAD Drawing

Low Loss Flexible RG174 Type Coax Cable Double Shielded with Black LSZH Jacket



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DWG TITLE  
**PE-C100-LSZH**

FSCM NO. 53919

CAD FILE 031313

SCALE N/A

SIZE A

2233

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