

NOTICE OF PROPRIETARY RIGHTS THIS DOCUMENT CONTAINS CONFIDENTIAL TECHNICAL DATA, INCLUDING TRADE SECRETS, PROPRIETARY TO TIMES MICROWAVE SYSTEMS. DISCLOSURE OF THIS DATA IS EXPRESSLY CONDITIONED UPON YOUR ASSENT THAT ITS USE IS LIMITED TO USE WITHIN YOUR COMPANY ONLY. ANY OTHER USE IS STRICTLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF TIMES MICROWAVE SYSTEMS.

SYM	REVISION DESCRIPTION	DFTM	DATE	APPD	DATE
-	RELEASED FOR PRODUCTION	J. C. L.	8/20/03	J. C. L.	8/20/03
A	CHANGED PER CDC #36704	D. J. H.	1/14/13	J. D. B.	1/15/13
B	CHANGED PER CDC #37206	J. D. B.	3/226/13	J. D. B.	3/26/13



NOTES:

- ASSEMBLED CONNECTOR INTERFACE IS DESIGNED IN ACCORDANCE WITH MIL-STD-348.
- MATERIAL: BODY & HEX COUPLING NUT- CORROSION RESISTANT STEEL PER ASTM A582.
CONTACT - BERYLLIUM COPPER PER ASTM B196.
INSULATOR - TEFLON PER ASTM D1710
GASKET - SILICONE RUBBER PER ZZ-R-765
SHRINK SLEEVE - SHRINKABLE POLYOLEFIN PER MIL-I-23053/5
FERRULE - D.H.P. COPPER CDA ALLOY 122
- FINISHES: BODY & HEX COUPLING NUT - PASSIVATE PER QQ-P-35
CONTACT - GOLD PLATE PER MIL-G-45204
FERRULE - SULFAMATE NICKEL PLATE
- CONTACT PIN IS SOLDERED.
- CRIMP THE FERRULE TO .128" HEX.

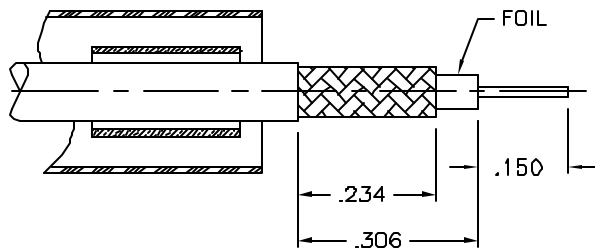
MATERIAL:	UNLESS OTHERWISE SPECIFIED		DFTM. J. C. L.	TIMES MICROWAVE SYSTEMS	
	ALL DIMENSIONS ARE IN INCHES MACHINED SURFACES FINISH N/A RMS MAX. REMOVE ALL BURRS .005 MAX. BREAK MACHINE CORNERS .005 MAX. FILLET R. TOLERANCES ON DECIMALS .XX ± .03 .XXX ± .005 ANGLES ± 1° FRACTIONS ± 1/32		DATE 8/20/03		
USED ON: A			CHKD. J. C. L.	TC-100-SM SMA MALE FOR LMR100 CABLE	
			DATE 8/20/03		
SCALE: N/A	DWG. SIZE A	DO NOT SCALE DRAWING	CODE IDENT 68999	APPD. J. C. L.	SHEET 1 of 1 SD3190-1551 REV B
			DATE 8/20/03		



TIMES MICROWAVE SYSTEMS

358 Hall Avenue/P.O. Box 5039
Wallingford, CT 06492-5039
Tel: 203-949-8400
FAX: 203-949-8423
1-800-TMS-COAX
www.timesmicrowave.com

INSTALLATION INSTRUCTIONS TC-100-SM (TIMES 3190-1551) (Cable Types: LMR-100)



- 1) A. Trim cable to dimensions shown. Slide shrink sleeve & crimp sleeve back onto cable.
B. Remove any residual plastic from the center conductor and deburr center conductor using a fine file.



- 2) A. Slide contact onto center conductor leaving a .020 gap as shown and solder to center conductor. Use minimal heat to minimize melting of foam dielectric. Inspect to be sure aluminum foil is not touching center contact.



- 3) A. Insert cable into connector until fully seated, with all braid wires on the outside of connector body and aluminum tape inside connector body.
B. Slide crimp sleeve forward and crimp as close as possible to body using a .128" hex die. Use Times HX-4 crimp tool or equivalent. Do not crimp rear of crimp sleeve.
C. Heat shrink weather seal over rear of connector body and down onto cable jacket using hot air gun.



FAKRA Jack Right Angle Connector Crimp/Solder Attachment for RG174, RG316, RG188, .100 inch, PE-B100, PE-C100, LMR-100, Water Blue Color

RF Connectors Technical Data Sheet

PE44648Z

Configuration

- FAKRA Jack Connector
- 50 Ohms
- Right Angle Body Geometry
- RG174, RG316, RG188, .100 inch, PE-B100, PE-C100, LMR-100 Interface Type
- Crimp/Solder Attachment

Features

- Max. Operating Frequency 4 GHz
- Good VSWR of 1.5:1
- Gold Plated Phosphor Bronze Contact

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

Pasternack's PE44648Z FAKRA jack right angle connector with crimp/solder attachment for RG174, RG316, RG188, .100 inch, PE-B100, PE-C100 and LMR-100 is part of our full line of RF components available for same-day shipping. Our FAKRA jack connector operates up to a maximum frequency of 4 GHz and offers good VSWR of 1.5:1. Its right angle body geometry allows for easier connections in tight spaces.

Our FAKRA jack right angle connector PE44648Z 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		4	GHz
VSWR			1.5:1	
Operating Voltage (AC)			335	Vrms
Dielectric Withstanding Voltage (AC)			1,000	Vrms
Inner Conductor DC Resistance			6	mOhms
Outer Conductor DC Resistance			2.5	mOhms
Insulation Resistance	1,000			MOhms

Mechanical Specifications

Size

Length	0.035 in [0.89 mm]
Width/Dia.	0.37 in [9.40 mm]
Height	0.752 in [19.1 mm]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [FAKRA Jack Right Angle Connector Crimp/Solder Attachment for RG174, RG316, RG188, .100 inch, PE-B100, PE-C100, LMR-100, Water Blue Color PE44648Z](#)



FAKRA Jack Right Angle Connector Crimp/Solder Attachment for RG174, RG316, RG188, .100 inch, PE-B100, PE-C100, LMR-100, Water Blue Color

RF Connectors Technical Data Sheet

PE44648Z

Weight 0.014 lbs [6.35 g]

Material Specifications

Description	Material	Plating
Contact	Phosphor Bronze	Gold
Insulation	PTFE	
Outer Conductor	Brass	Nickel
Body	Plastic	

Environmental Specifications

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

Plotted and Other Data

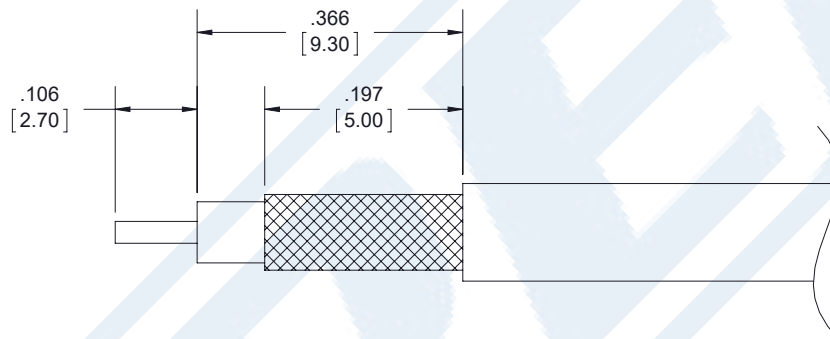
Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [FAKRA Jack Right Angle Connector Crimp/Solder Attachment for RG174, RG316, RG188, .100 inch, PE-B100, PE-C100, LMR-100, Water Blue Color PE44648Z](#)



FAKRA Jack Right Angle Connector Crimp/Solder Attachment for RG174, RG316, RG188, .100 inch, PE-B100, PE-C100, LMR-100, Water Blue Color

Assembly Instruction



ASSEMBLY PROCEDURES

1. STRIP CABLE TO THE DIMENSIONS SHOWN AND SLIDE FERRULE OVER CABLE.
2. INSTALL CABLE INTO BODY OF CONNECTOR AND SOFT SOLDER CENTER CONDUCTOR IN PLACE.
3. CRIMP FERRULE AND PRESS CAP DOWN.

CRIMP SIZE REQUIRED

- FERRULE: .128 [3.25] HEX CRIMP TOOL.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [FAKRA Jack Right Angle Connector Crimp/Solder Attachment for RG174, RG316, RG188, .100 inch, PE-B100, PE-C100, LMR-100, Water Blue Color PE44648Z](#)



FAKRA Jack Right Angle Connector Crimp/Solder Attachment for RG174, RG316, RG188, .100 inch, PE-B100, PE-C100, LMR-100, Water Blue Color

RF Connectors Technical Data Sheet

PE44648Z

FAKRA Jack Right Angle Connector Crimp/Solder Attachment for RG174, RG316, RG188, .100 inch, PE-B100, PE-C100, LMR-100, Water Blue Color 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: [FAKRA Jack Right Angle Connector Crimp/Solder Attachment for RG174, RG316, RG188, .100 inch, PE-B100, PE-C100, LMR-100, Water Blue Color PE44648Z](https://www.pasternack.com/fakra-jack-standard-pe-c100-rg174-rg316-connector-pe44648z-p.aspx)

URL: <https://www.pasternack.com/fakra-jack-standard-pe-c100-rg174-rg316-connector-pe44648z-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.

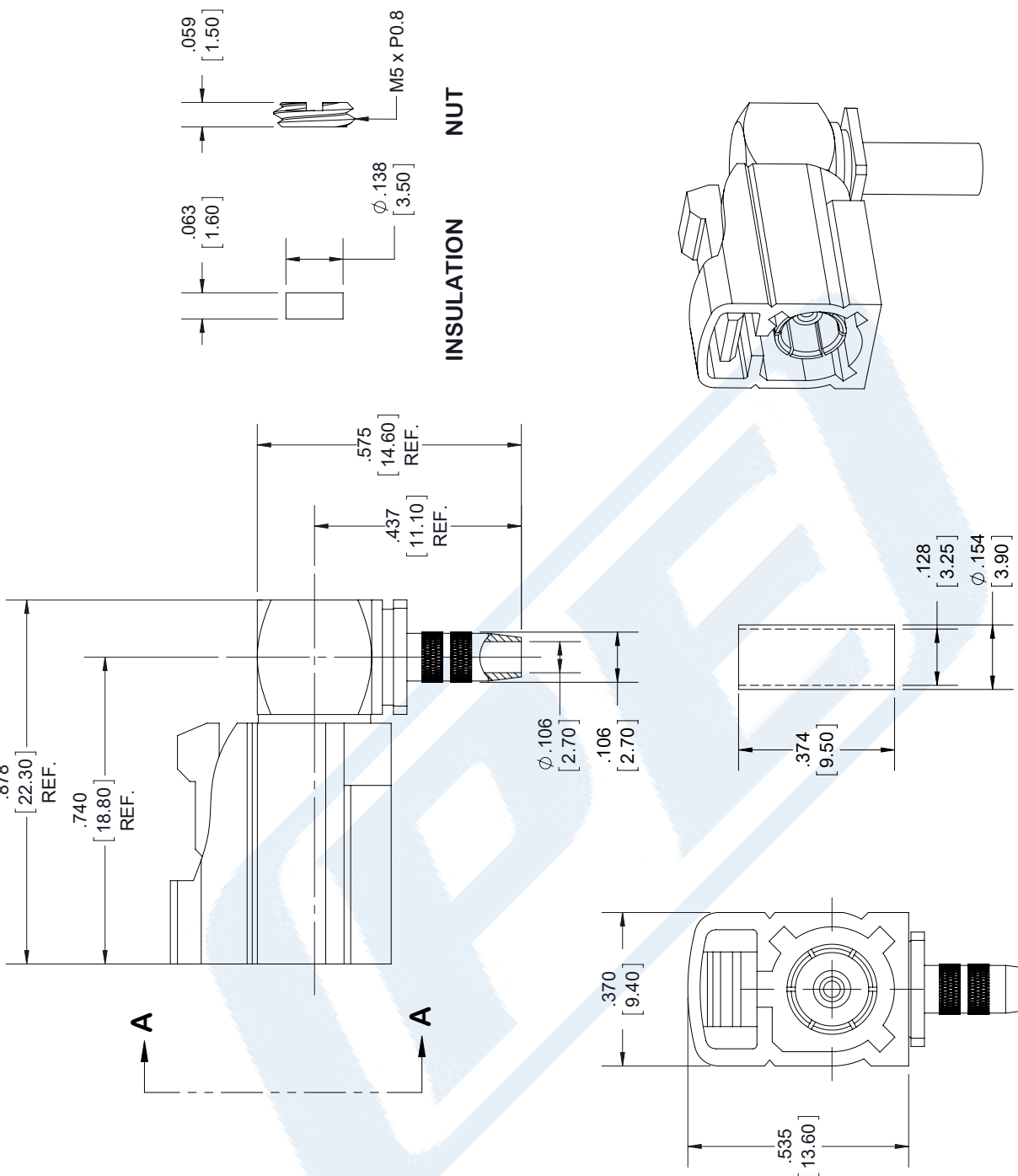
PE44648Z CAD Drawing

FAKRA Jack Right Angle Connector Crimp/Solder Attachment for RG174, RG316, RG188, .100 inch, PE-B100, PE-C100, LMR-100, Water Blue Color

FAKRA CONFIGURATION			APPLICATION
CODING	JACK	COLOR	
A		BLACK	RADIO WITH PHANTOM SUPPLY
B		WHITE	RADIO WITHOUT PHANTOM SUPPLY
C		BLUE	GPS: TELEMATICS OR NAVIGATION
D		BORDEAUX	GSM: CELLULAR PHONE
H		VIOLET	GPS: TELEMATICS AND NAVIGATION
I		BEIGE	BLUETOOTH
K		CURRY	RADIO WITH IF OUTPUT (ANTENNA DIVERSITY)
Z		WATER BLUE	NEUTRAL CODING

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

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES



FERRULE

VIEW A-A

<p>NOTES:</p> <ol style="list-style-type: none"> UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME DIMENSIONS ARE IN INCHES [mm]. 	CAD FILE	090617	SCALE	N/A	SIZE	A	7361
	CAGE CODE		53919		DWG TITLE		

CAGE CODE		53919		DWG TITLE			PE44648Z
-----------	--	-------	--	-----------	--	--	----------

PE PASTERNAK
 THE ENGINEER'S RF SOURCE
 Pasternack Enterprises, Inc.
 P.O. Box 16759 | Irvine | CA | 92623
 Phone: (949) 261-1920 | Fax: (949) 261-7451
 Website: www.pasternack.com | E-Mail: sales@pasternack.com

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 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.

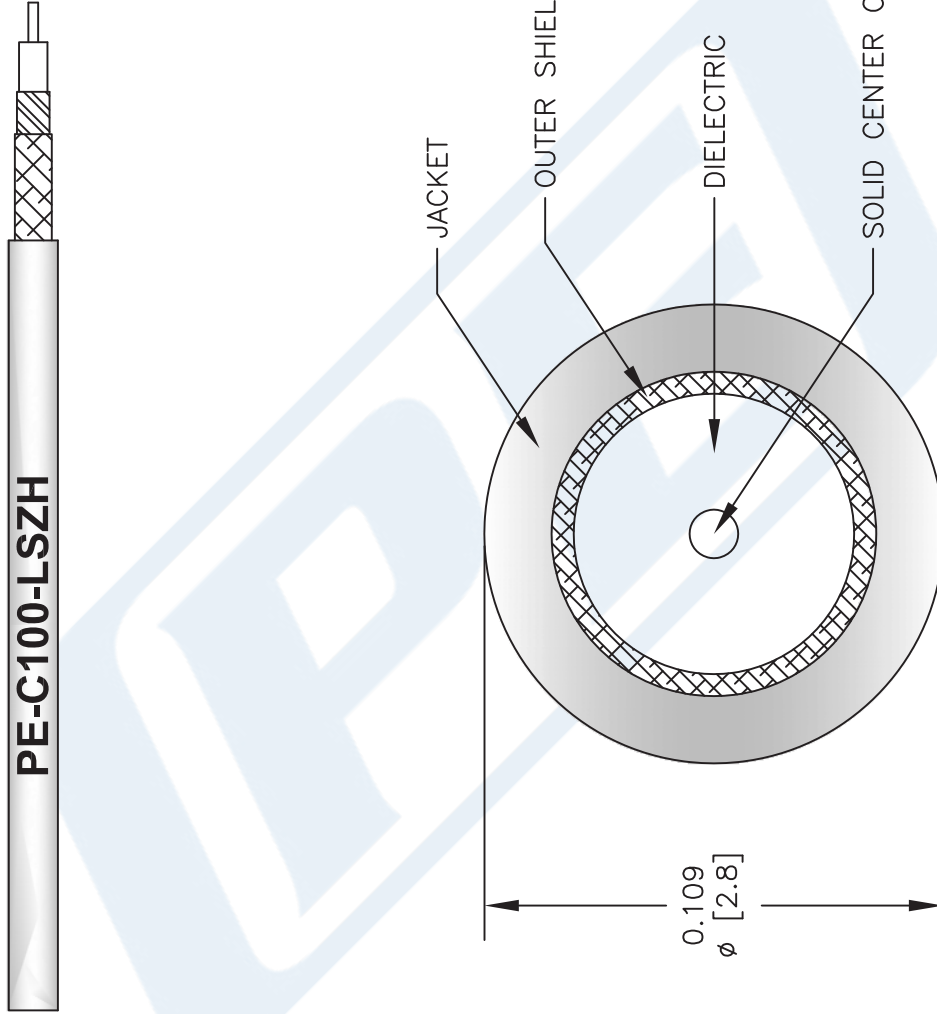
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low Loss Flexible RG174 Type Coax Cable Double Shielded with Black LSZH Jacket PE-C100-LSZH](#)

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

PE-C100-LSZH CAD Drawing

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



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].

DWG TITLE
PE-C100-LSZH

FSCM NO. 53919

CAD FILE 031313

SCALE N/A

SIZE A

2233

PE PASTERNAK®
 Pasternack Enterprises, Inc.
 P.O. Box 16759 | Irvine | CA | 92623
Phone: (949) 261-1920 | **Fax:** (949) 261-7451
Website: www.pasternack.com | **E-Mail:** sales@pasternack.com