



SMA Male to TNC Female Bulkhead Low Loss Cable Using PE-P142LL Coax, RoHS

RF Cable Assemblies Technical Data Sheet

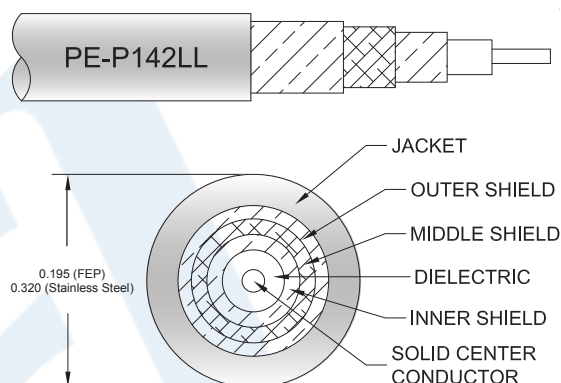
PE3C2449

Configuration

- Connector 1: SMA Male
- Connector 2: TNC Female Bulkhead
- Cable Type: PE-P142LL

Features

- Max Frequency 18 GHz
- Shielding Effectivity > 95 dB
- 83% Phase Velocity
- Triple Shielded
- FEP Jacket 83% Velocity of Propagation
- Maximum VSWR is < 1.40:1 to 18 GHz
- Minimum Bend Radius of 1 inch
- Operating Temperature range of -55 to +125°C
- ROHS and REACH Compliant
- Same day shipment of custom lengths



Applications

- General Purpose
- Laboratory Use

Description

The PE3C2449 series high performance test cable's 0.195 inch diameter and 83% phase velocity offer very low loss performance up to 18 GHz. The durable stainless steel connectors and FEP jacket provide a cost effective design ideal for test environments where a rugged cable assembly is required. The series is offered with Type N, TNC, and SMA connectors all rated to 18 GHz. A heavy duty boot provides improved strain relief and adds to the durability of the cable assemblies. These cable assemblies are built using a double shielded flexible cable, providing excellent shielding effectiveness of greater than 95 dB. All PE3C2449 cable assemblies are 100% Continuity, Hi-POT, and RF tested to published specifications. Custom lengths are built to order and shipped same day

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to TNC Female Bulkhead Low Loss Cable Using PE-P142LL Coax, RoHS PE3C2449](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		18	GHz
VSWR			1.4:1	
Return Loss			15.56	dB
Insertion Loss			0.4	dB/ft
			1.31	dB/m
Velocity of Propagation		83		%
RF Shielding	95			dB
Capacitance		25 [82.02]		pF/ft [pF/m]

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	1	2	4.5	9	18	GHz
Insertion Loss (Max.)	0.1	0.14	0.2	0.29	0.4	dB/ft
	0.33	0.46	0.66	0.95	1.31	dB/m
Insertion Loss (Typ.)	0.07	0.1	0.16	0.23	0.33	dB/ft
	0.23	0.33	0.52	0.75	1.08	dB/m
Power Handling (Max.)	820	600	350	250	175	W

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.05dB x vFrequency (GHz) per connector.

Mechanical Specifications

Cable Assembly

Diameter 0.625 in [15.88 mm]

Weight 0.086 lbs [39.01 g]

Cable

Cable Type PE-P142LL

Impedance 50 Ohms

Inner Conductor Type Solid

Inner Conductor Material and Plating Copper, Silver

Dielectric Type PTFE

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Number of Shields	3
Shield Layer 1	Silver Plated Copper Tape
Shield Layer 2	Aluminum Polyester
Shield Layer 3	Silver Plated Copper Wire
Jacket Material	FEP, Green
Jacket Diameter	0.195 in [4.95 mm]

One Time Minimum Bend Radius	1 in [25.4 mm]
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Connectors

Description	Connector 1	Connector 2
Type	SMA Male	TNC Female Bulkhead
Specification	MIL-STD-348	MIL-STD-348
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Specification	ASTM-B488 50μ In. Min	ASTM-B488, 50μ In. Min
Dielectric Type	PTFE	PEI
Outer Conductor Material and Plating		Passivated Stainless Steel
Outer Conductor Plating Specification		SAE-AMS-2700
Body Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Body Plating Specification	SAE-AMS-2700	SAE-AMS-2700
Coupling Nut Material and Plating	Passivated Stainless Steel	
Coupling Nut Plating Specification	SAE-AMS-2700	
Hex Size	5/16 Inch	
Torque	8 in-lbs [0.9 Nm]	

Mechanical Specification Notes:

*All cable assemblies have a length tolerance of 1.5% or $\pm 3/8"$, whichever is greater.

Environmental Specifications

Temperature

Operating Range	-55 to +125 deg C
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Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

- Values at 25°C, sea level.

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How to Order

Part Number Configuration:

PE3C2449

- **xx**

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Unit of Measure:
cm = Centimeters
<blank> = Inches
Length
Base Number

Example: PE3C2449-12 = 12 inches long cable
PE3C2449-100cm = 100 cm long cable

SMA Male to TNC Female Bulkhead Low Loss Cable Using PE-P142LL Coax, RoHS 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.

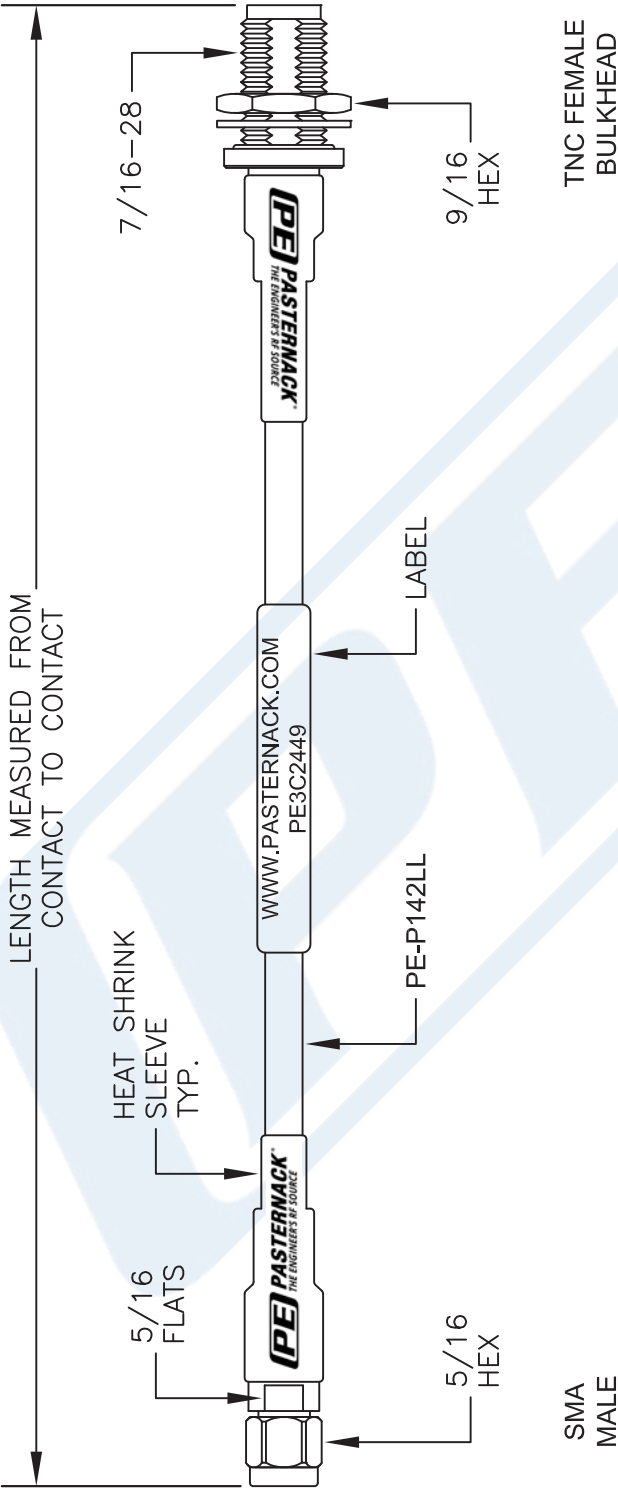
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PE3C2449 CAD Drawing

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NOTE: LABEL FOR CABLE LENGTHS 48" OR SHORTER TO BE CENTERED. 48" OR LONGER WILL BE 12" AWAY FROM CONNECTOR.

- 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. LENGTH TOLERANCE IS $\pm 1.5\%$ OR $3/8"$, WHICHEVER IS GREATER.

DWG TITLE

PE3C2449

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

FSCM NO. 53919

CAD FILE 061516

SCALE N/A

SIZE A

2233