



SMA Male to TNC Female Bulkhead Low Loss Cable 48 Inch Length Using PE-P142LL Coax, RoHS

RF Cable Assemblies Technical Data Sheet

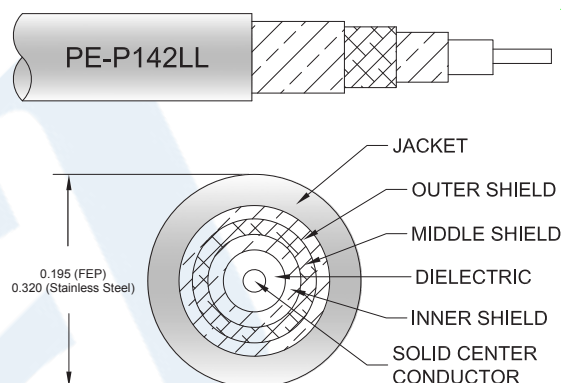
PE3C2449-48

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

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		18	GHz
VSWR			1.4:1	
Return Loss			15.56	dB
Insertion Loss			2.02	dB
Velocity of Propagation		83		%
RF Shielding	95			dB
Capacitance		25 [82.02]		pF/ft [pF/m]

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 48 Inch Length Using PE-P142LL Coax, RoHS PE3C2449-48](#)



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Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	1	2	4.5	9	18	GHz
Insertion Loss (Max.)	0.82	0.98	1.22	1.58	2.02	dB
Insertion Loss (Typ.)	0.7	0.82	1.06	1.34	1.74	dB
Power Handling (Max.)	820	600	350	250	175	W

Mechanical Specifications

Cable Assembly

Length*	48 in [121.92 cm]
Diameter	0.625 in [15.88 mm]

Cable

Cable Type	PE-P142LL
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper, Silver
Dielectric Type	PTFE
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

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

uu

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 48 Inch Length 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.

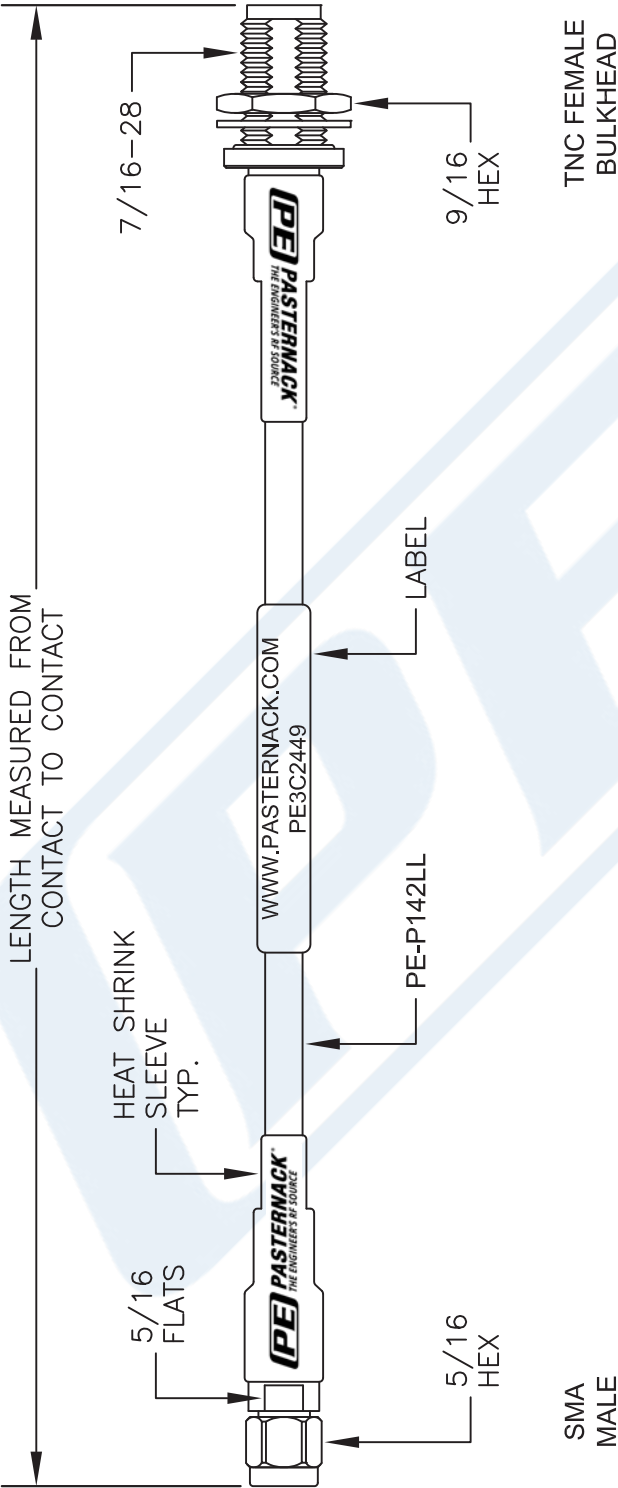
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PE3C2449-48 CAD Drawing

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



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



PASTERNAK®
THE ENGINEER'S RF SOURCE

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DWG TITLE

PE3C2449

FSCM NO. 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].
- 4. LENGTH TOLERANCE IS $\pm 1.5\%$ OR $3/8"$, WHICHEVER IS GREATER.

CAD FILE 061516

SCALE N/A

SIZE A

2233

Mouser Electronics

Authorized Distributor

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[PE3C2449-48](#)