



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

### RF Cable Assemblies Technical Data Sheet

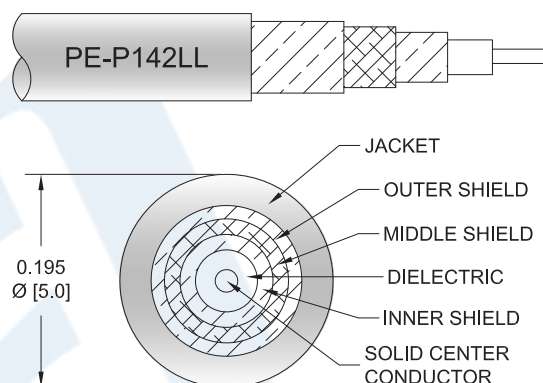
PE3C2162

#### Configuration

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

#### Features

- 83% Velocity of Propagation
- Shielding effectiveness > 95 dB
- 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



#### Description

The PE3C2162 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 PE3C2162 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
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 N Female Bulkhead Low Loss Cable Using PE-P142LL Coax, RoHS PE3C2162](#)



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

### RF Cable Assemblies Technical Data Sheet

PE3C2162

#### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	1	2	4.5	9	18	GHz
Insertion Loss (Max.)	0.1 [0.33]	0.14 [0.46]	0.2 [0.66]	0.29 [0.95]	0.4 [1.31]	dB/ft [dB/m]
Insertion Loss (Typ.)	0.07 [0.23]	0.1 [0.33]	0.16 [0.52]	0.23 [0.75]	0.33 [1.08]	dB/ft [dB/m]
VSWR (Max.)	1.25:1	1.25:1	1.25:1	1.35:1	1.4:1	

#### 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 0.875 in [22.23 mm]

Weight 0.111 lbs [50.35 g]

##### 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]

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 N Female Bulkhead Low Loss Cable Using PE-P142LL Coax, RoHS PE3C2162](#)



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

### RF Cable Assemblies Technical Data Sheet

PE3C2162

#### Connectors

Description	Connector 1	Connector 2
Type	SMA Male	N 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. Minimum	ASTM-B488, 50µ In. Minimum
Dielectric Type	PTFE	PEI
Outer Conductor Material and Plating		Passivated Stainless Steel
Outer Conductor Plating Specification		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]	
Body Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Body Plating Specification	SAE-AMS-2700	SAE-AMS-2700

#### Environmental Specifications

##### Temperature

Operating Range -55 to +125 deg C

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

#### Plotted and Other Data

Notes:

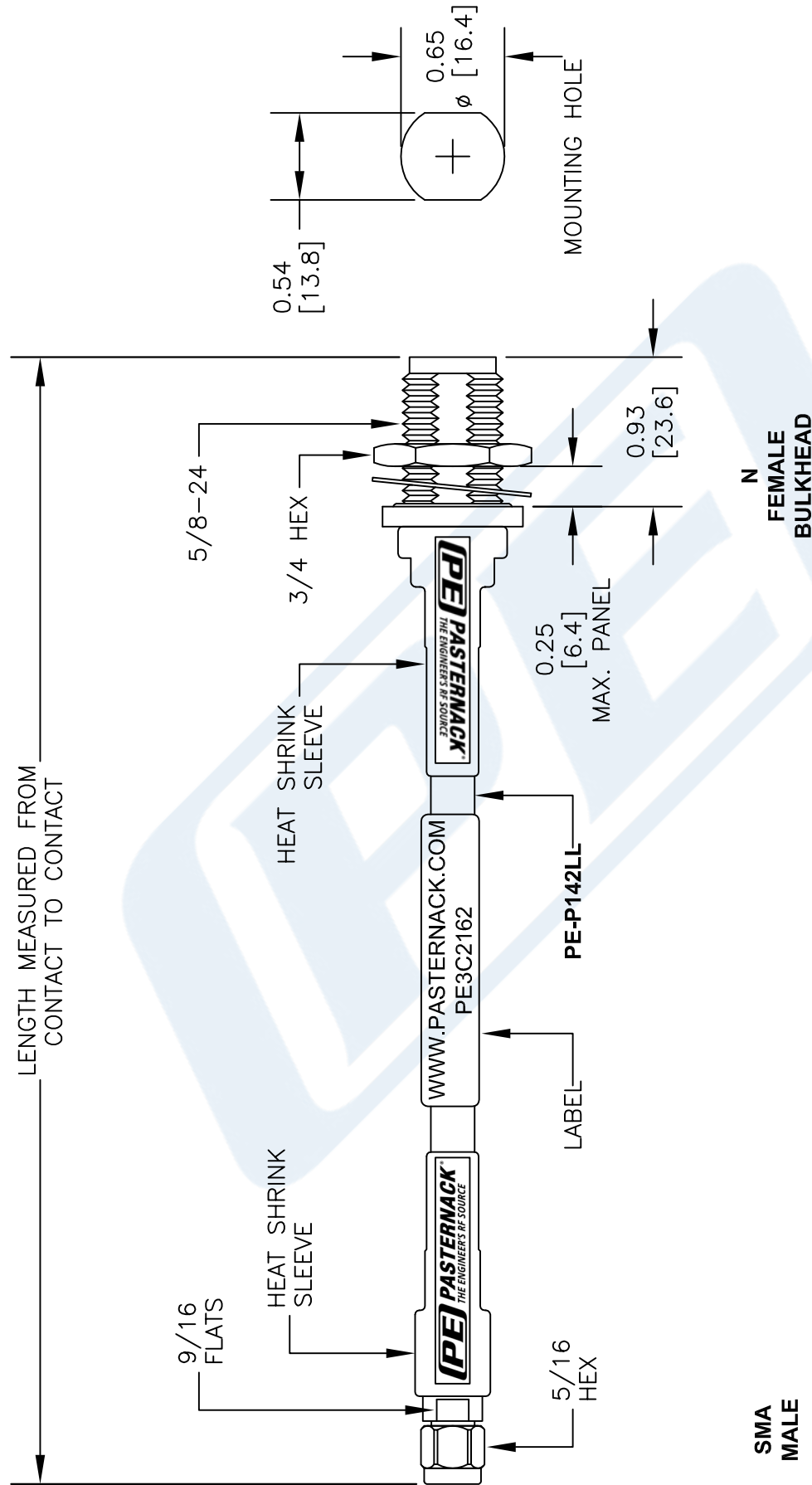
- Values at 25°C, sea level.

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 N Female Bulkhead Low Loss Cable Using PE-P142LL Coax, RoHS PE3C2162](#)



# PE3C2162 CAD Drawing

SMA Male to N Female Bulkhead Low Loss Cable 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.

- 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

PE3C2162

**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 073015

SCALE N/A

SIZE A

150