



SMA Male Right Angle to TNC Male Low Loss Cable Using PE-P142LL Coax, RoHS

RF Cable Assemblies Technical Data Sheet

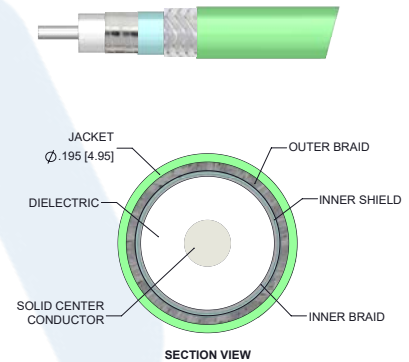
PE3C1179

Configuration

- Connector 1: SMA Male Right Angle
- Connector 2: TNC Male
- Cable Type: PE-P142LL

Features

- Max Frequency 18 GHz
- Shielding Effectivity > 95 dB
- 83% Phase Velocity
- Triple Shielded
- FEP Jacket
- 83% Velocity of Propagation
- Shielding effectiveness > 95 dB
- Maximum VSWR is < 1.45:1 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 customs lengths



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C1179 SMA male right angle to TNC male cable using PE-P142LL coax is part of our full line of RF components available for same-day shipping. Pasternack's flexible RF cable assemblies are ideal for applications where tight bends and flexure are required. This Pasternack SMA to TNC cable assembly has a male to male gender configuration with 50 ohm flexible PE-P142LL coax. The PE3C1179 SMA male to TNC male cable assembly operates to 18 GHz. The right angle SMA interface on the PE-P142LL cable allows for easier connections in tight spaces. The triple shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 95 dB. The PE3C1179 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 PE3C1179 cable assemblies are 100% Continuity, Hi-POT, and RF tested to published specifications. Custom lengths are built to order and shipped same day

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other available RF cable assembly value added services include connector orientation or clocking, heat shrink booting and custom labeling. RF testing can also be performed to document the electrical performance of your cable assembly.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Right Angle to TNC Male Low Loss Cable Using PE-P142LL Coax, RoHS PE3C1179](#)



SMA Male Right Angle to TNC Male Low Loss Cable Using PE-P142LL Coax, RoHS

RF Cable Assemblies Technical Data Sheet

PE3C1179

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		18	GHz
VSWR			1.45:1	
Return Loss			14.72	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	0.1	0.2	0.3	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

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

Weight 0.2 lbs [90.72 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

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Right Angle to TNC Male Low Loss Cable Using PE-P142LL Coax, RoHS PE3C1179](#)



SMA Male Right Angle to TNC Male Low Loss Cable Using PE-P142LL Coax, RoHS

RF Cable Assemblies Technical Data Sheet

PE3C1179

Jacket Material	FEP, Green
Jacket Diameter	0.195 in [4.95 mm]
One Time Minimum Bend Radius	1 in [25.4 mm]

Connectors

Description	Connector 1	Connector 2
Type	SMA Male Right Angle	TNC Male
Specification	MIL-PRF-39012	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	Passivated Stainless Steel
Outer Conductor Plating Specification	SAE-AMS-2700	SAE-AMS-2701
Body Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Body Plating Specification	SAE-AMS-2700	SAE-AMS-2701
Coupling Nut Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Coupling Nut Plating Specification	SAE-AMS-2700	SAE-AMS-2701
Hex Size	5/16 Inch	9/16 Inch
Torque	8 in-lbs [0.9 Nm]	

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 Right Angle to TNC Male Low Loss Cable Using PE-P142LL Coax, RoHS PE3C1179](#)



SMA Male Right Angle to TNC Male Low Loss
Cable Using PE-P142LL Coax, RoHS

RF Cable Assemblies Technical Data Sheet

PE3C1179

How to Order

Part Number Configuration:

PE3C1179

- **xx**

uu

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

Example: PE3C1179-12 = 12 inches long cable
PE3C1179-100cm = 100 cm long cable

SMA Male Right Angle to TNC Male 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.

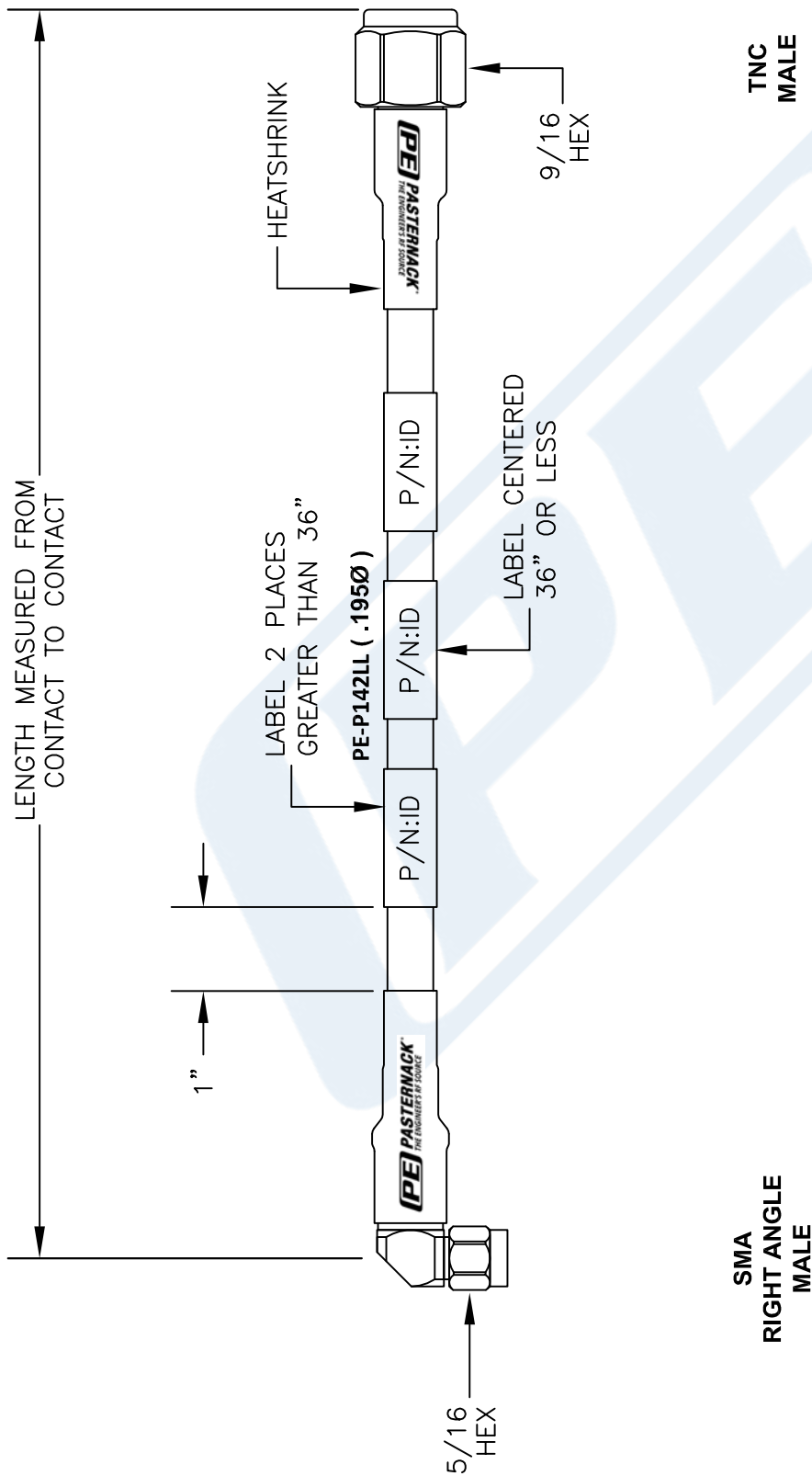
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Right Angle to TNC Male Low Loss Cable Using PE-P142LL Coax, RoHS PE3C1179](#)

URL: <https://www.pasternack.com/sma-male-tnc-male-pe-p142ll-cable-assembly-pe3c1179-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.

PE3C1179 CAD Drawing

SMA Male Right Angle to TNC Male Low Loss Cable Using PE-P142LL Coax, RoHS



**SMA
RIGHT ANGLE
MALE**

**TNC
MALE**

How To Order		Part # Ext.	Length In Inches	Part # Ext.	Length In Centimeters
Part Number Configuration PE3zzzzz [Y] - [xx] [uu] LF = RoHS Compliant < Blank > = Standard Note: LF applies only to RF cables	Examples	-12	12"	-25CM	25Cm
	PE3000LF-100	-24	24"	-50CM	50Cm
	PE3000-100	-36	36"	-75CM	75Cm
	PE3000LF-100CM	-48	48"	-100CM	100Cm
	PE3000-100CM	-60	60"	-125CM	125Cm
		-xx	Custom Length	-xxCM	Custom Length

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

DWG TITLE
PE3C1179

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 ± 1.5% OR 3/8", WHICHEVER IS GREATER.

FSCM NO. 53919	CAD FILE 120214	SCALE N/A	SIZE A	150
----------------	-----------------	-----------	--------	-----