



## Push-On SMP Female Right Angle to Reverse Polarity TNC Female Bulkhead Cable 50 cm Length Using LMR-100 Coax

### RF Cable Assemblies Technical Data Sheet

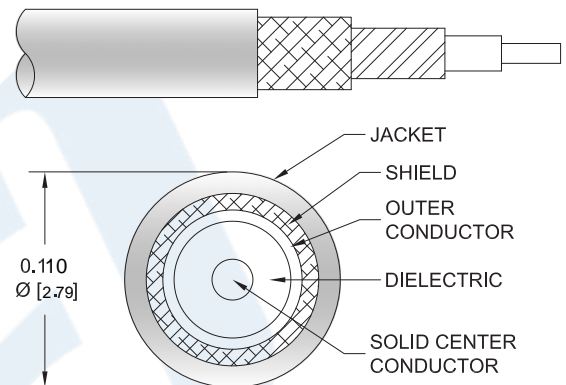
PE3W05481-50CM

#### Configuration

- Connector 1: Push-OnSMP Female Right Angle
- Connector 2: TNC Female Reverse Polarity Bulkhead
- Cable Type: LMR-100A

#### Features

- Max Frequency 3 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- PVC Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3W05481-50CM SMP female push-on right angle to reverse polarity TNC female bulkhead 50 cm cable using LMR-100 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 SMP to reverse polarity TNC cable assembly has a female to female gender configuration with 50 ohm flexible LMR-100A coax. The PE3W05481-50CM SMP female to reverse polarity TNC female cable assembly operates to 3 GHz. The right angle SMP interface on the LMR-100A cable allows for easier connections in tight spaces. Our RF cable assembly with TNC bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 90 dB.

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: [Push-On SMP Female Right Angle to Reverse Polarity TNC Female Bulkhead Cable 50 cm Length Using LMR-100 Coax PE3W05481-50CM](#)



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**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.4:1	
Velocity of Propagation		66		%
RF Shielding	90			dB
Group Delay		1.54 [5.05]		ns/ft [ns/m]
Capacitance		30.8 [101.05]		pF/ft [pF/m]
Inductance		0.077 [0.25]		uH/ft [uH/m]
DC Resistance Inner Conductor Km]		81 [265.75]		Ohms/1000ft [Ohms/ Km]
DC Resistance Outer Conductor Km]		9.5 [31.17]		Ohms/1000ft [Ohms/ Km]
Jacket Spark			2,000	Vrms

**Specifications by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	3	GHz
Insertion Loss (Max.)	0.49	0.57	0.7	0.96	1.02	dB

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.3dB of connector loss.

**Mechanical Specifications**

**Cable Assembly**

Length\* 19.68 in [499.87 mm]  
Diameter 0.68 in [17.27 mm]

**Cable**

Cable Type LMR-100A  
Impedance 50 Ohms  
Inner Conductor Type Solid  
Inner Conductor Material and Plating Copper Clad Steel  
Dielectric Type PE  
Number of Shields 2  
Shield Layer 1 Aluminum Tape  
Shield Layer 2 Tinned Copper Braid

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Jacket Material	PVC, Black
Jacket Diameter	0.11 in [2.79 mm]
One Time Minimum Bend Radius	0.25 in [6.35 mm]
Repeated Minimum Bend Radius	1 in [25.4 mm]
Bending Moment	0.1 lbs-ft [0.14 N-m]
Flat Plate Crush	10 lbs/in [0.18 Kg/mm]
Tensile Strength	15 lbs [6.8 Kg]

**Connectors**

Description	Connector 1	Connector 2
Type	SMP Female Right Angle	TNC Female Reverse Polarity Bulkhead
Specification	MIL-STD-348A	MIL-STD-348
Impedance	50 Ohms	50 Ohms
Connection Method	Push-On	
Contact Material and Plating	Beryllium Copper, Gold	Phosphor Bronze, Gold
Contact Plating Specification	30µ in. minimum	30 µin minimum
Dielectric Type	Teflon	PTFE
Outer Conductor Material and Plating	Beryllium Copper, Gold	
Outer Conductor Plating Specification	3µ in. minimum	
Body Material and Plating	Brass, Gold	Brass, Nickel
Body Plating Specification	3µ in. minimum	

Mechanical Specification Notes:

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

**Environmental Specifications**

**Temperature**

Operating Range -40 to +85 deg C

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

**Plotted and Other Data**

Notes:

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PE3W05481-50CM

**How to Order**

Part Number Configuration:

**PE3W05481**

- **xx**

**uu**

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

Example: PE3W05481-12 = 12 inches long cable  
PE3W05481-100cm = 100 cm long cable

Push-On SMP Female Right Angle to Reverse Polarity TNC Female Bulkhead Cable 50 cm Length Using LMR-100 Coax 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: [Push-On SMP Female Right Angle to Reverse Polarity TNC Female Bulkhead Cable 50 cm Length Using LMR-100 Coax PE3W05481-50CM](https://www.pasternack.com/smp-female-tnc-female-lmr100-cable-assembly-pe3w05481-50cm-p.aspx)

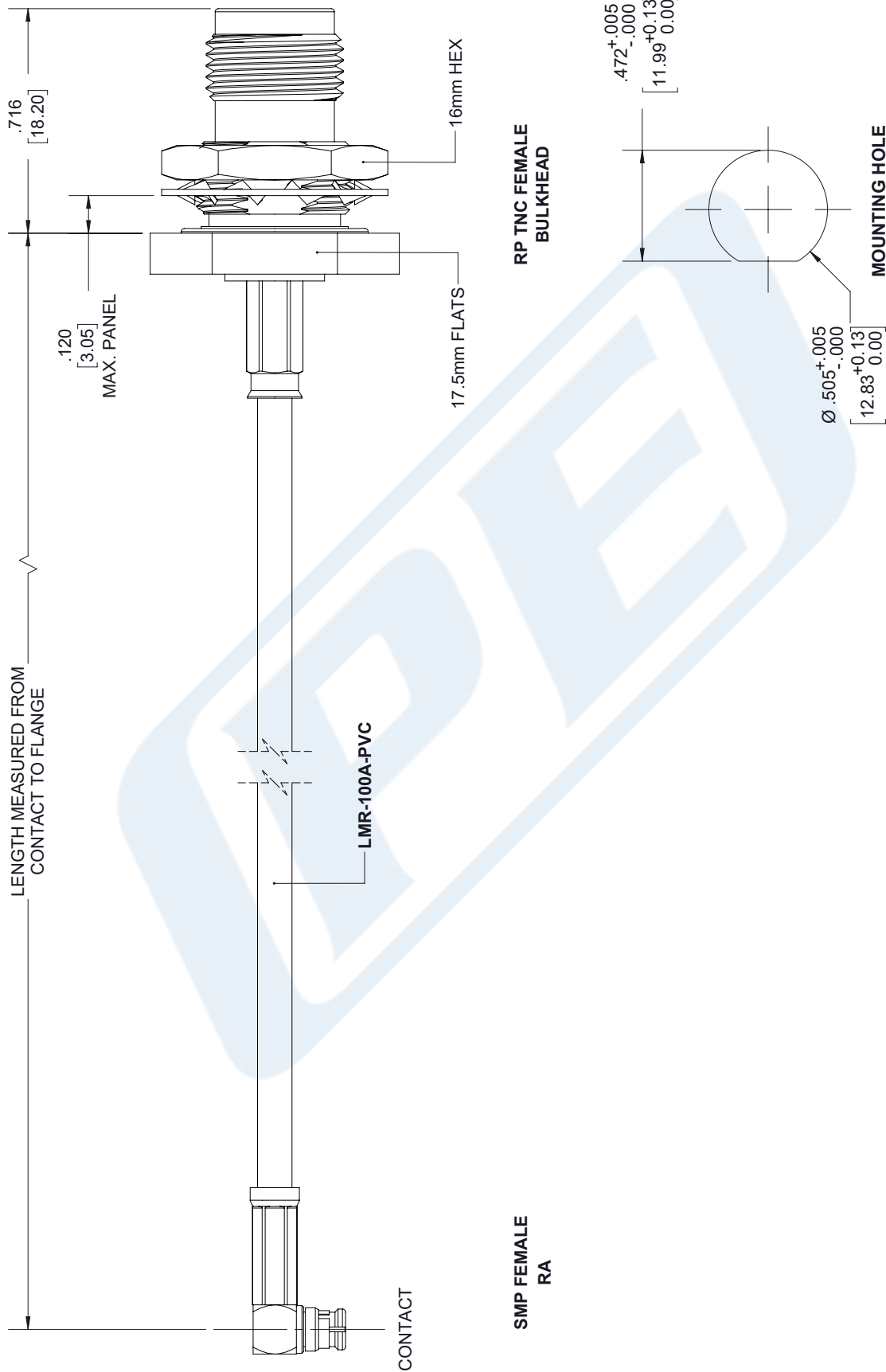
URL: <https://www.pasternack.com/smp-female-tnc-female-lmr100-cable-assembly-pe3w05481-50cm-p.aspx>

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# PE3W05481-50CM CAD Drawing

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	05/02/19	S.ELLIS



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:

X±.2	[5.08]	FRACTIONS
.XX±.01	[.25]	±132
.XXX±.005	[.13]	ANGLES ± 1°

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

**PE PASTERNAK**  
an INFINITO brand

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SHEET	1	OF	1
SCALE	N/A		
SIZE	CAGE	DRAWN BY	PART NUMBER
A	53919	K.DANG	PE3W05481
REV	REV		
A	A		

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