

TNC Female Bulkhead to SMA Male Right Angle Low Loss Cable Using LMR-100 Coax, LF Solder



PE3W00110LF

Configuration

- Connector 1: TNC Female Bulkhead
- Connector 2: SMA Male Right Angle
- Cable Type: LMR-100A
- Coax Cable Group: 8
- Coax Flex Type: Flexible

Features

- Max Frequency 1 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- PVC Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W00110LF TNC female bulkhead to SMA male right angle 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 TNC to SMA cable assembly has a female to male gender configuration with 50 ohm flexible LMR-100A coax. The PE3W00110LF TNC female to SMA male cable assembly operates to 1 GHz. The right angle SMA 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.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		1	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		81 [265.75]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		9.5 [31.17]		Ohms/1000ft [Ohms/Km]

TNC Female Bulkhead to SMA Male Right Angle Low Loss Cable Using LMR-100 Coax, LF Solder



PE3W00110LF

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			2,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency					MHz	
PE3W00110LF	Custom Lengths Available	Insertion Loss (Typ.)	0.039	0.064	0.115	0.165	0.24	dB/ft	
			0.13	0.21	0.38	0.55	0.79	dB/m	
PE3W00110LF-24	24 In	Insertion Loss (Typ.)	0.38	0.43	0.53	0.63	0.78	dB	0.079
PE3W00110LF-36	36 In	Insertion Loss (Typ.)	0.42	0.5	0.65	0.8	1.02	dB	0.088
PE3W00110LF-48	48 In	Insertion Loss (Typ.)	0.46	0.56	0.76	0.96	1.26	dB	0.097
PE3W00110LF-100CM	100 CM	Insertion Loss (Typ.)	0.43	0.51	0.68	0.85	1.09	dB	0.091
PE3W00110LF-200CM	200 CM	Insertion Loss (Typ.)	0.56	0.72	1.06	1.39	1.88	dB	0.121

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1:	0.1 dB
Loss due to Connector 2:	0.2 dB
Base Weight:	0.07 pounds
Additional Weight per Inch:	0.00075 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.07 lbs [31.75 g]

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
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]

TNC Female Bulkhead to SMA Male Right Angle Low Loss Cable Using LMR-100 Coax, LF Solder



PE3W00110LF

Connectors

Description	Connector 1	Connector 2
Type	TNC Female Bulkhead	SMA Male Right Angle
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	30 µin minimum	50 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin minimum	100 µin minimum
Coupling Nut Material and Plating		Brass, Nickel
Coupling Nut Plating Specification		100 µin minimum
Hex Size		5/16 inch
Torque		3 in-lbs 0.34 Nm

Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

Plotted and Other Data

Notes:

TNC Female Bulkhead to SMA Male Right Angle Low Loss Cable Using LMR-100 Coax, LF Solder

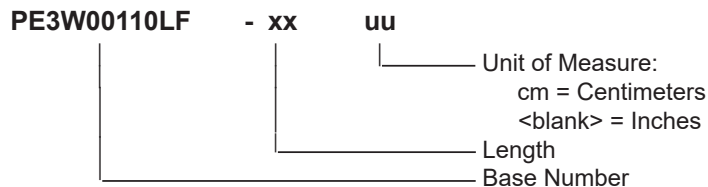


PE3W00110LF

Typical Performance Data

How to Order

Part Number Configuration:



Example: PE3W00110LF-12 = 12 inches long cable
PE3W00110LF-100cm = 100 cm long cable

TNC Female Bulkhead to SMA Male Right Angle Low Loss Cable Using LMR-100 Coax, LF Solder 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.

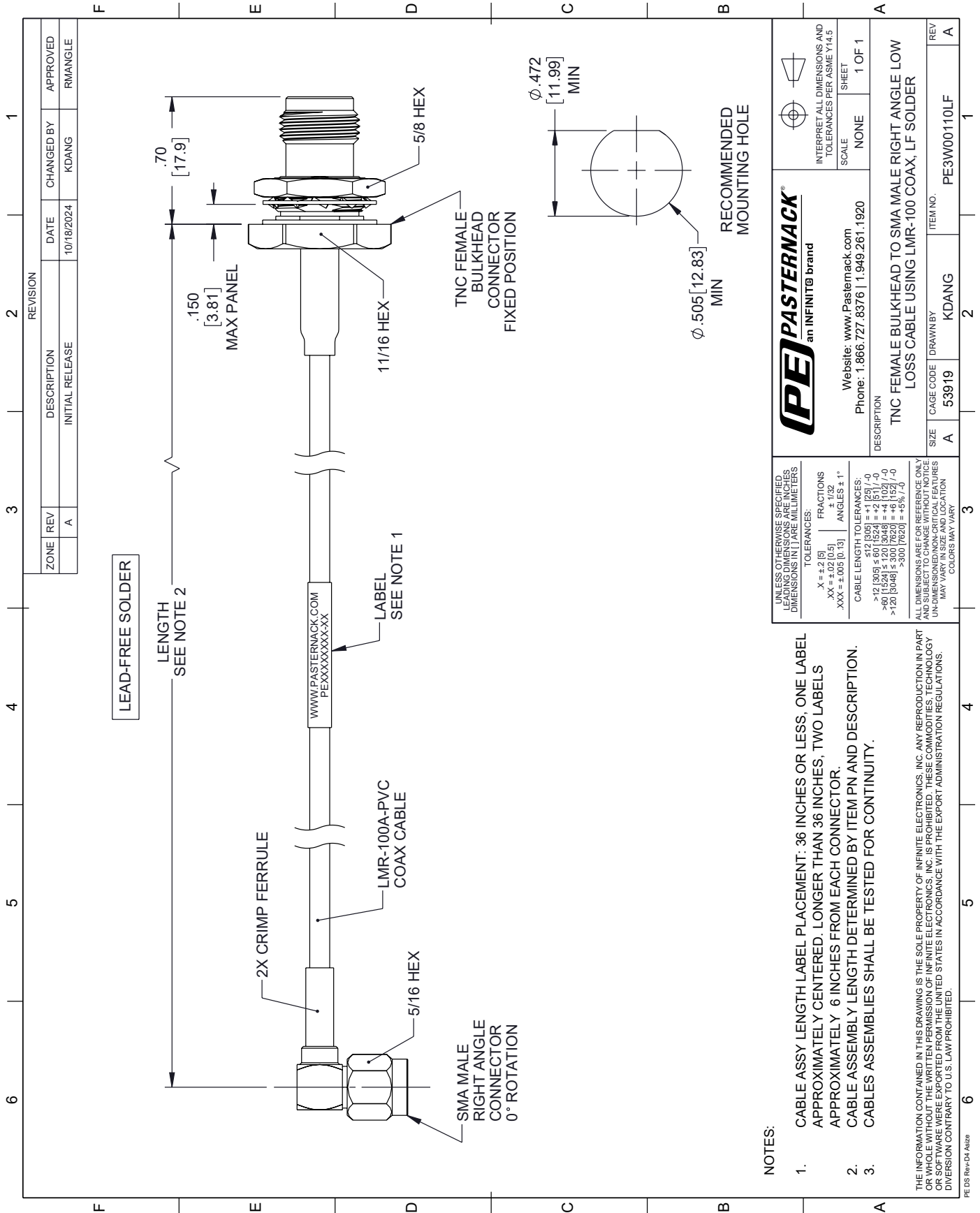
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [TNC Female Bulkhead to SMA Male Right Angle Low Loss Cable Using LMR-100 Coax, LF Solder PE3W00110LF](https://www.pasternack.com/tnc-female-bulkhead-to-sma-male-right-angle-low-loss-cable-using-lmr-100-coax-lf-solder-pe3w00110lf)

URL: <https://www.pasternack.com/tnc-female-bulkhead-to-sma-male-low-loss-cable-using-lmr-100-lf-solder-pe3w00110lf-p.aspx>

The information contained within 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 Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

PE3W00110LF CAD Drawing

TNC Female Bulkhead to SMA Male Right Angle Low Loss Cable Using LMR-100 Coax, LF Solder



- NOTES:
- CABLE ASSY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
 - CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.
 - CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

PE DS Rev-04 A1828