



Reverse Polarity TNC Female Bulkhead to Reverse Polarity SMA Male Cable Using LMR-100 Coax

RF Cable Assemblies Technical Data Sheet

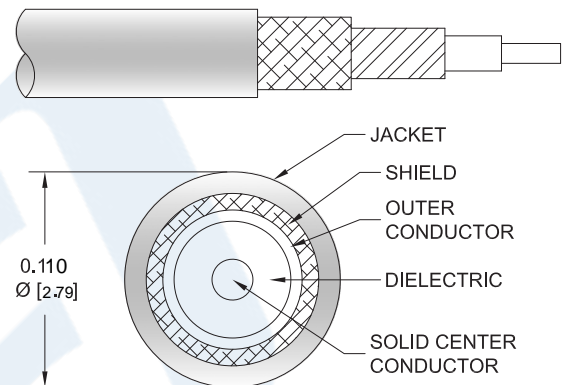
PE3W07758

Configuration

- Connector 1: TNC Female Reverse Polarity Bulkhead
- Connector 2: SMA Male Reverse Polarity
- 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 PE3W07758 reverse polarity TNC female bulkhead to reverse polarity SMA male 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 reverse polarity TNC to reverse polarity SMA cable assembly has a female to male gender configuration with 50 ohm flexible LMR-100A coax. The PE3W07758 reverse polarity TNC female to reverse polarity SMA male cable assembly operates to 3 GHz. 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: [Reverse Polarity TNC Female Bulkhead to Reverse Polarity SMA Male Cable Using LMR-100 Coax PE3W07758](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.45:1	
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]		Ω /1000ft [Ω /Km]
DC Resistance Outer Conductor		9.5 [31.17]		Ω /1000ft [Ω /Km]
Jacket Spark			2,000	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	3	GHz
Insertion Loss (Max.)	0.06	0.07	0.1	0.15	0.35	dB/ft
	0.2	0.23	0.33	0.49	1.15	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

Diameter 0.75 in [19.05 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
 Jacket Material PVC, Black
 Jacket Diameter 0.11 in [2.79 mm]

One Time Minimum Bend Radius 0.25 in [6.35 mm]

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Reverse Polarity TNC Female Bulkhead to Reverse Polarity
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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	TNC Female Reverse Polarity Bulkhead	SMA Male Reverse Polarity
Specification		MIL-STD-348
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Phosphor Bronze, Gold	Gold
Contact Plating Specification	30 µin minimum	MIL-G-45204
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification		QQ-N-290
Coupling Nut Material and Plating		Brass, Nickel
Coupling Nut Plating Specification		QQ-N-290
Hex Size		5/16 inch
Torque		3 in-lbs [0.34 Nm]

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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PE3W07758

How to Order

Part Number Configuration:

PE3W07758

- **xx**

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Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3W07758-12 = 12 inches long cable
PE3W07758-100cm = 100 cm long cable

Reverse Polarity TNC Female Bulkhead to Reverse Polarity SMA Male Cable 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: [Reverse Polarity TNC Female Bulkhead to Reverse Polarity SMA Male Cable Using LMR-100 Coax PE3W07758](https://www.pasternack.com/tnc-female-sma-male-lmr100-cable-assembly-pe3w07758-p.aspx)

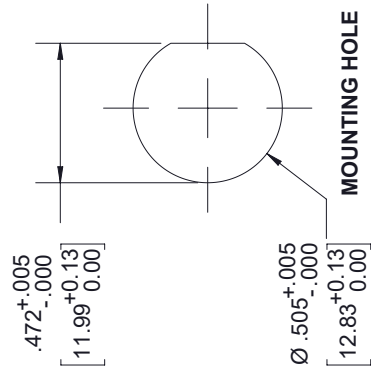
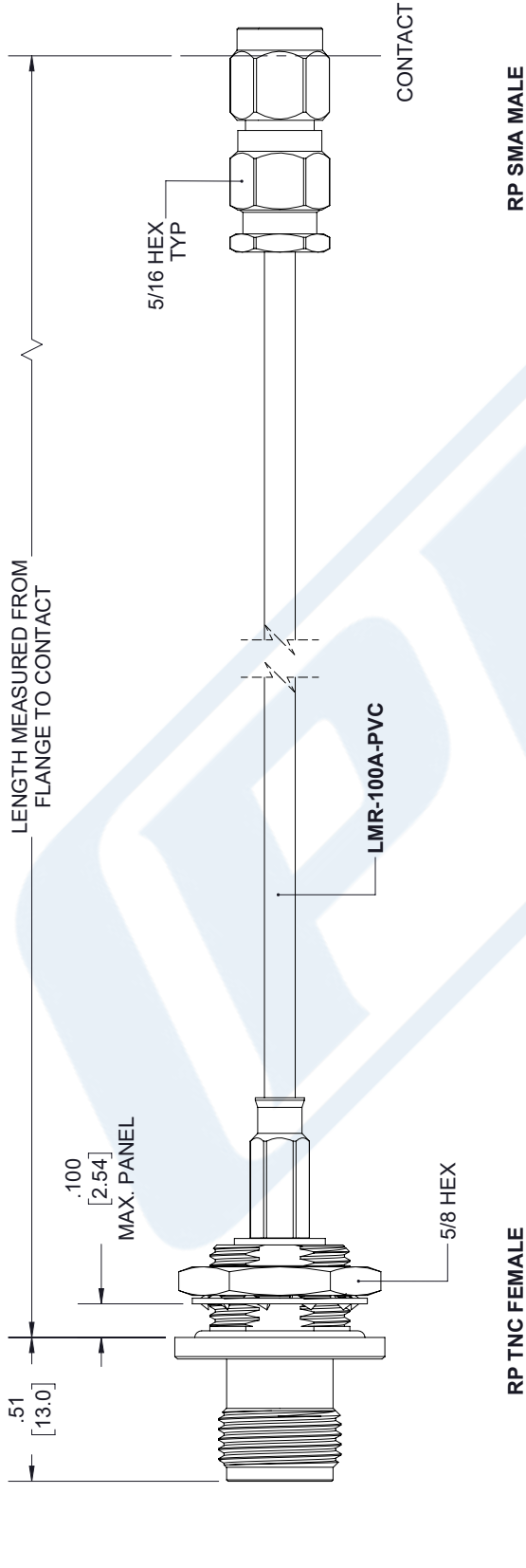
URL: <https://www.pasternack.com/tnc-female-sma-male-lmr100-cable-assembly-pe3w07758-p.aspx>

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PE3W07758 CAD Drawing

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	8/20/2020	S. SELLIS



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

TOLERANCES:

.X = ±.2	[.08]	FRACTIONS	± 1/32
.XX = ±.02	[.51]	ANGLES	± 1°
.XXX = ±.005	[.13]	CABLE LENGTH (L) TOLERANCES:	
L ≤ 12 [305] = +1 [25] / -0			
12 [305] < L ≤ 60 [1524] = +2 [51] / -0			
60 [1524] < L ≤ 120 [3048] = +4 [102] / -0			
120 [3048] < L ≤ 300 [7620] = +6 [152] / -0			
300 [7620] < L = +5% / -0			

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

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SCALE N/A

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SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	K.DANG	PE3W07758
REV	REV		REV
			A