

Reverse Polarity SMA Jack Bulkhead to Reverse Polarity TNC Plug Low Loss Cable Using LMR-100 Coax



PE3C1758

Configuration

- Connector 1: SMA Jack Reverse Polarity Bulkhead
- Connector 2: TNC Plug Reverse Polarity
- Cable Type: LMR-100A
- Coax Flex Type: Flexible

Features

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



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C1758 reverse polarity SMA jack bulkhead to reverse polarity TNC plug 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 SMA to reverse polarity TNC cable assembly has a jack to plug gender configuration with 50 ohm flexible LMR-100A coax. The PE3C1758 reverse polarity SMA jack to reverse polarity TNC plug cable assembly operates to 3 GHz. Our RF cable assembly with SMA 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		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		81 [265.75]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		9.5 [31.17]		Ohms/1000ft [Ohms/Km]

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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	
PE3C1758	Custom Lengths Available	Insertion Loss (Typ.)	0.064	0.115	0.165	0.24	0.432	dB/ft	
			0.21	0.38	0.55	0.79	1.42	dB/m	
PE3C1758-24	24 In	Insertion Loss (Typ.)	0.33	0.43	0.53	0.68	1.07	dB	0.07
PE3C1758-36	36 In	Insertion Loss (Typ.)	0.4	0.55	0.7	0.92	1.5	dB	0.079
PE3C1758-48	48 In	Insertion Loss (Typ.)	0.46	0.66	0.86	1.16	1.93	dB	0.088
PE3C1758-100CM	100 CM	Insertion Loss (Typ.)	0.41	0.58	0.75	0.99	1.62	dB	0.082
PE3C1758-200CM	200 CM	Insertion Loss (Typ.)	0.62	0.96	1.29	1.78	3.04	dB	0.112

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:	0.1 dB
Base Weight:	0.061 pounds
Additional Weight per Inch:	0.00075 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.061 lbs [27.67 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]

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Connectors

Description	Connector 1	Connector 2
Type	SMA Jack Reverse Polarity Bulkhead	TNC Plug Reverse Polarity
Specification		Mil-C-39012
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	50 µin minimum	30 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin minimum	200 µin minimum
Coupling Nut Material and Plating		Brass, Nickel
Coupling Nut Plating Specification		200 µin minimum

Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

Plotted and Other Data

Notes:
Values at 25°C, sea level.

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PE3C1758

Typical Performance Data

How to Order

Part Number Configuration:

PE3C1758

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Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3C1758-12 = 12 inches long cable
PE3C1758-100cm = 100 cm long cable

Reverse Polarity SMA Jack Bulkhead to Reverse Polarity TNC Plug Low Loss 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.

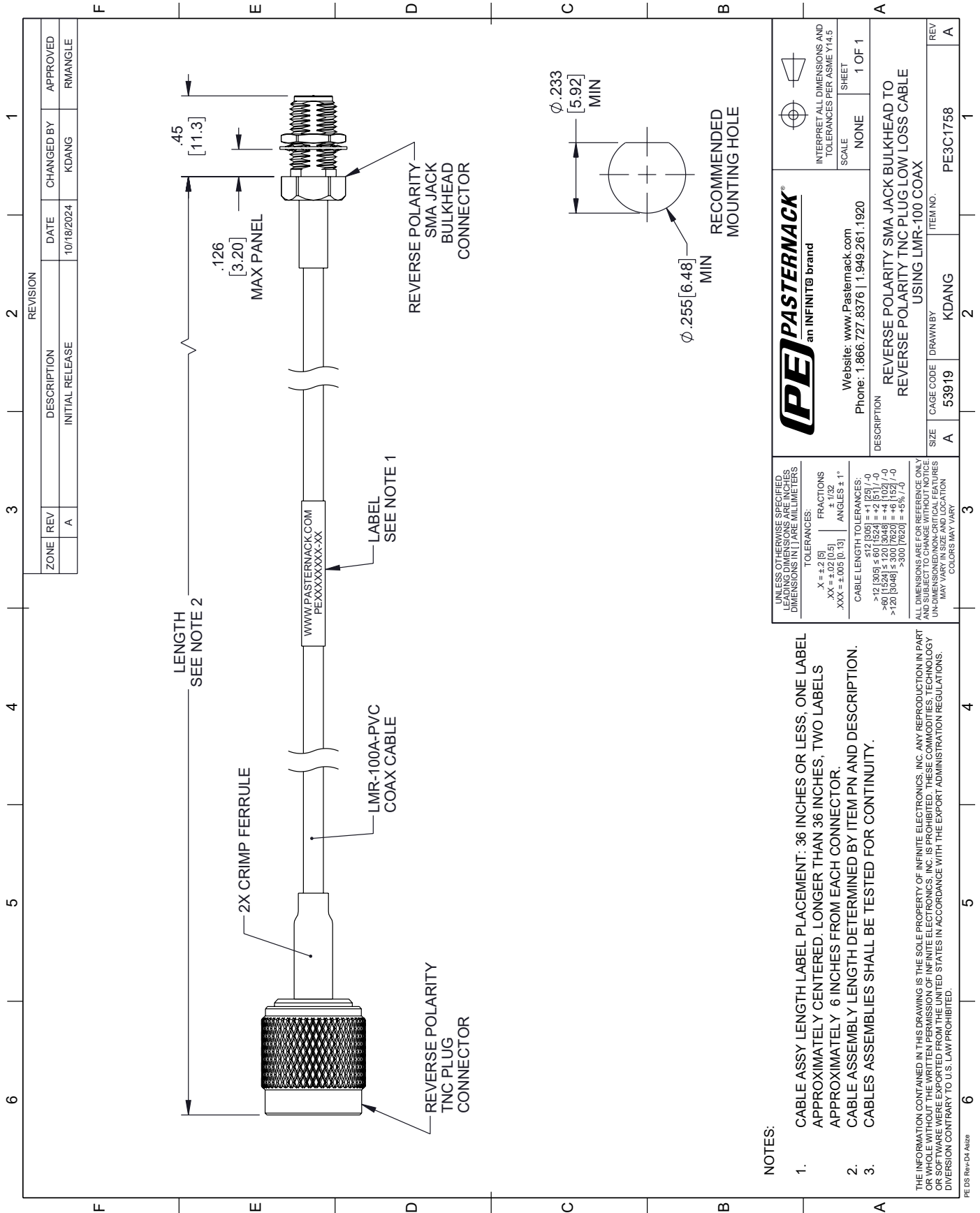
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Reverse Polarity SMA Jack Bulkhead to Reverse Polarity TNC Plug Low Loss Cable Using LMR-100 Coax PE3C1758](#)

URL: <https://www.pasternack.com/reverse-polarity-sma-jack-bulkhead-to-reverse-polarity-tnc-plug-low-loss-cable-using-lmr-100-pe3c1758-p.aspx>

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PE3C1758 CAD Drawing

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NOTES:

1. 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.
2. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.
3. CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN PARENS ARE MILLIMETERS	
TOLERANCES:	
X = ±.02 [0.5]	FRACTIONS ± 1/32
.XX = ±.005 [0.13]	ANGLES ± 1°
CABLE LENGTH TOLERANCES:	
>12 [305] ≤ 60 [1524] = +1 [25] / -0	
>60 [1524] ≤ 120 [3048] = +4 [102] / -0	
>120 [3048] ≤ 300 [7620] = +5% / -0	
ALL DIMENSIONS ARE FOR REFERENCE ONLY DIMENSIONS ON CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION COLORS MAY VARY	

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INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	SCALE NONE
SHEET 1 OF 1	
DESCRIPTION REVERSE POLARITY SMA JACK BULKHEAD TO REVERSE POLARITY TNC PLUG LOW LOSS CABLE USING LMR-100 COAX	
SIZE A	CAGE CODE 53919
DRAWN BY KDANG	ITEM NO. PE3C1758