

TNC Male to TNC Female Right Angle Bulkhead Low Loss Cable Using LMR-200 Coax



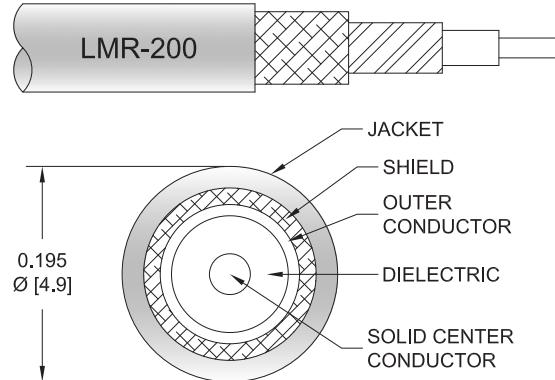
PE3W10648

Configuration

- Connector 1: TNC Male
- Connector 2: TNC Female Right Angle Bulkhead
- Cable Type: LMR-200
- Coax Flex Type: Flexible

Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 83% Phase Velocity
- Double Shielded
- PE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W10648 TNC male to TNC female right angle bulkhead cable using LMR-200 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 TNC cable assembly has a male to female gender configuration with 50 ohm flexible LMR-200 coax. The PE3W10648 TNC male to TNC female cable assembly operates to 6 GHz. The right angle TNC interface on the LMR-200 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		6	GHz
VSWR			1.4:1	
Velocity of Propagation		83		%
RF Shielding	90			dB
Group Delay		1.22 [4]		ns/ft [ns/m]
Capacitance		24.5 [80.38]		pF/ft [pF/m]
Inductance		0.061 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		5.36 [17.59]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		4.9 [16.08]		Ohms/1000ft [Ohms/Km]

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Electrical Specifications

Description	Minimum	Typical				Maximum	Units
Jacket Spark					3,000		Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	250	500	1000	2500	6000	MHz	
PE3W10648	Custom Lengths Available	Insertion Loss (Typ.)	0.05	0.073	0.104	0.169	0.264	dB/ft	
			0.17	0.24	0.35	0.56	0.87	dB/m	
PE3W10648-24	24 in	Insertion Loss (Typ.)	0.42	0.47	0.53	0.66	0.85	dB	0.172
PE3W10648-36	36 in	Insertion Loss (Typ.)	0.47	0.54	0.64	0.83	1.12	dB	0.196
PE3W10648-48	48 in	Insertion Loss (Typ.)	0.52	0.62	0.74	1	1.38	dB	0.22
PE3W10648-60	60 in	Insertion Loss (Typ.)	0.57	0.69	0.84	1.17	1.64	dB	0.244
PE3W10648-72	72 in	Insertion Loss (Typ.)	0.62	0.76	0.95	1.34	1.91	dB	0.268

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: 0.12 dB
Loss due to Connector 2: 0.2 dB
Base Weight: 0.148 pounds
Additional Weight per Inch: 0.002 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter 0.5 in [12.7 mm]
Weight 0.148 lbs [67.13 g]

Cable

Cable Type LMR-200
Impedance 50 Ohms
Inner Conductor Type Solid
Inner Conductor Material and Plating Copper
Dielectric Type PE (F)
Number of Shields 2
Shield Layer 1 Aluminum Tape
Shield Layer 2 Tinned Copper Braid
Jacket Material PE, Black
Jacket Diameter 0.195 in [4.95 mm]
One Time Minimum Bend Radius 0.5 in [12.7 mm]
Repeated Minimum Bend Radius 2 in [50.8 mm]
Bending Moment 0.2 lbs-ft [0.27 N-m]
Flat Plate Crush 15 lbs/in [0.27 Kg/mm]
Tensile Strength 40 lbs [18.14 Kg]

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Connectors

Description	Connector 1	Connector 2
Type	TNC Male	TNC Female Right Angle Bulkhead
Specification	MIL-STD-348	
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
Contact Material and Plating	Beryllium Copper, Gold	Brass, Gold
Contact Plating Specification		30 μ in minimum
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Brass, Nickel
Body Material and Plating	Brass, Tri-Metal	Brass, Nickel
Body Plating Specification		100 μ in minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	
Hex Size	5/8 Inch	

Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

Plotted and Other Data

Notes:

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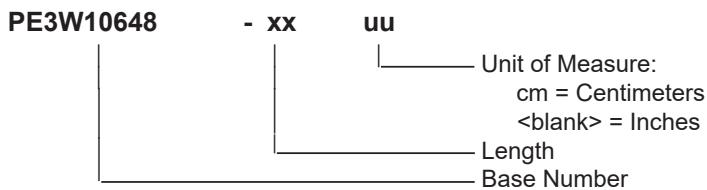


PE3W10648

Typical Performance Data

How to Order

Part Number Configuration:



Example: PE3W10648-12 = 12 inches long cable
PE3W10648-100cm = 100 cm long cable

TNC Male to TNC Female Right Angle Bulkhead Low Loss Cable Using LMR-200 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.

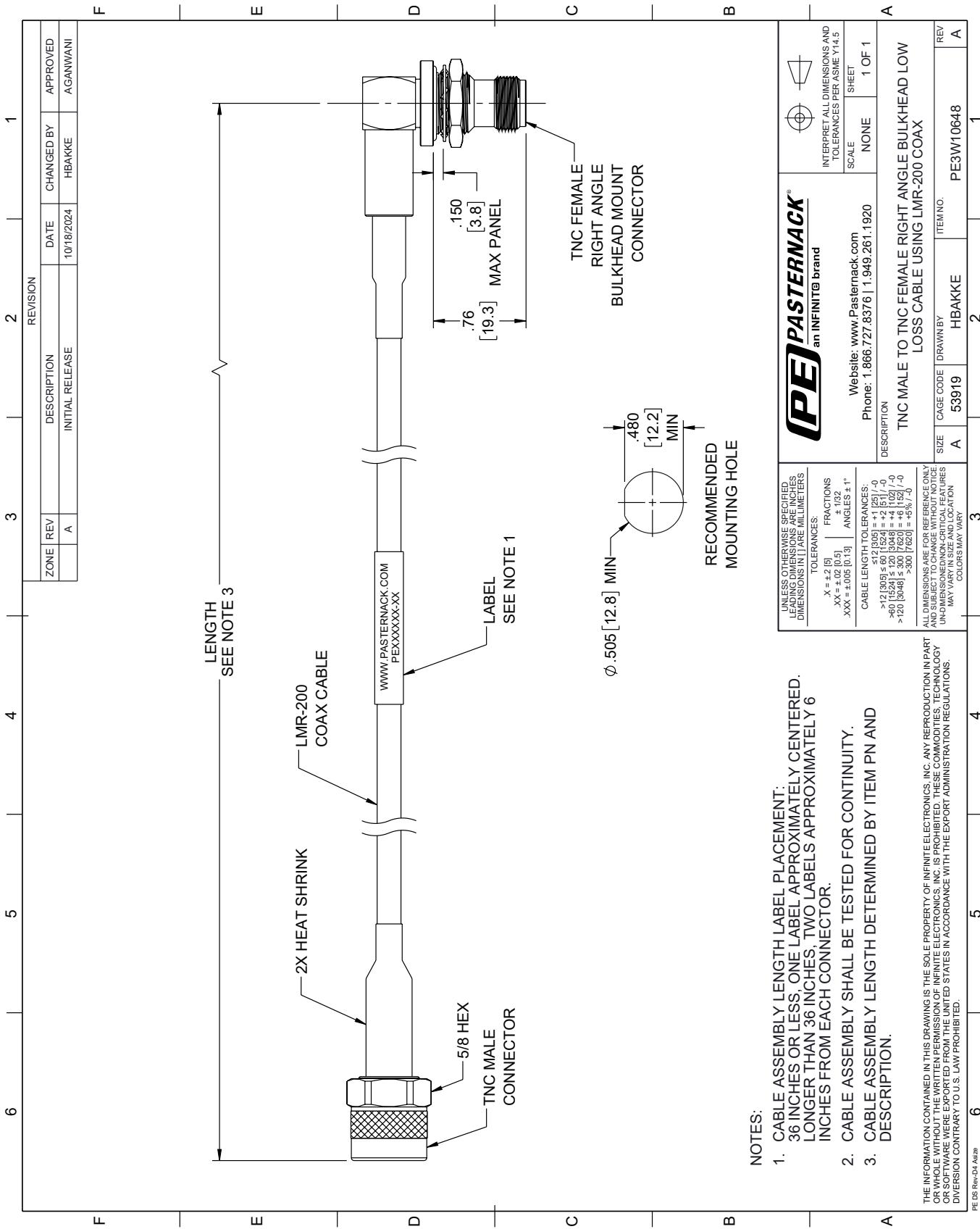
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [TNC Male to TNC Female Right Angle Bulkhead Low Loss Cable Using LMR-200 Coax PE3W10648](#)

URL: <https://www.pasternack.com/tnc-male-to-tnc-female-bulkhead-low-loss-cable-using-lmr-200-pe3w10648-p.aspx>

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PE3W10648 CAD Drawing

TNC Male to TNC Female Right Angle Bulkhead Low Loss Cable Using LMR-200 Coax



ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
A	A	INITIAL RELEASE	10/18/2024	HBAKKE	AGANWANI

REVISION

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