

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

PE3W10648

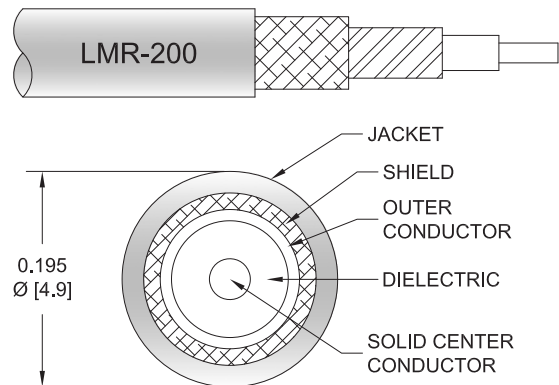


Configuration

- 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 µin 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 µin 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:

PE3W10648

- XX

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- Unit of Measure:
cm = Centimeters
<blank> = Inches

- Length

- Base Number

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

