



## Reverse Polarity TNC Female Bulkhead to Reverse Polarity SMA Male Cable 24 Inch Length Using LMR-100 Coax

### RF Cable Assemblies Technical Data Sheet

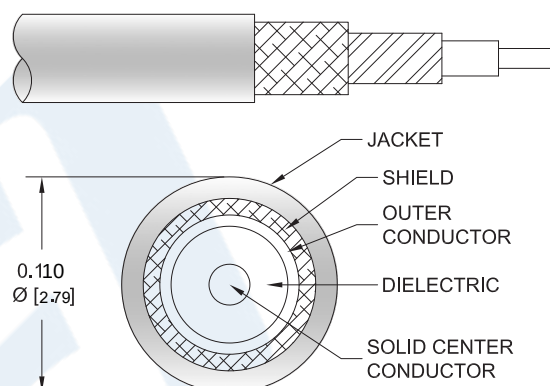
PE3W07758-24

#### 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 PE3W07758-24 reverse polarity TNC female bulkhead to reverse polarity SMA male 24 inch 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 PE3W07758-24 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 24 Inch Length Using LMR-100 Coax PE3W07758-24](#)



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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.) | 0.32 | 0.34 | 0.4 | 0.5 | 0.9 | dB    |

#### Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax used in this assembly. Insertion Loss is estimated as 0.1 dB per connector.

### Mechanical Specifications

#### Cable Assembly

|          |                    |
|----------|--------------------|
| Length*  | 24 in [609.6 mm]   |
| 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]   |

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Reverse Polarity TNC Female Bulkhead to Reverse Polarity  
SMA Male Cable 24 Inch Length Using LMR-100 Coax

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|                              |                        |
|------------------------------|------------------------|
| 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]        |

**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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## Reverse Polarity TNC Female Bulkhead to Reverse Polarity SMA Male Cable 24 Inch Length Using LMR-100 Coax

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PE3W07758-24

#### How to Order

Part Number Configuration:

**PE3W07758**

- **xx**

**uu**

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 24 Inch Length 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 24 Inch Length Using LMR-100 Coax PE3W07758-24](#)

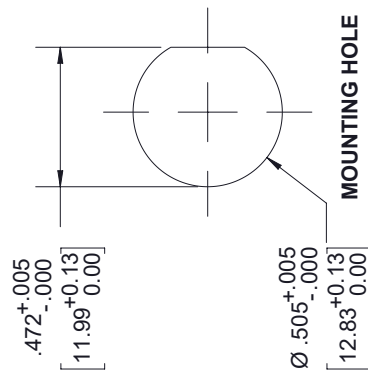
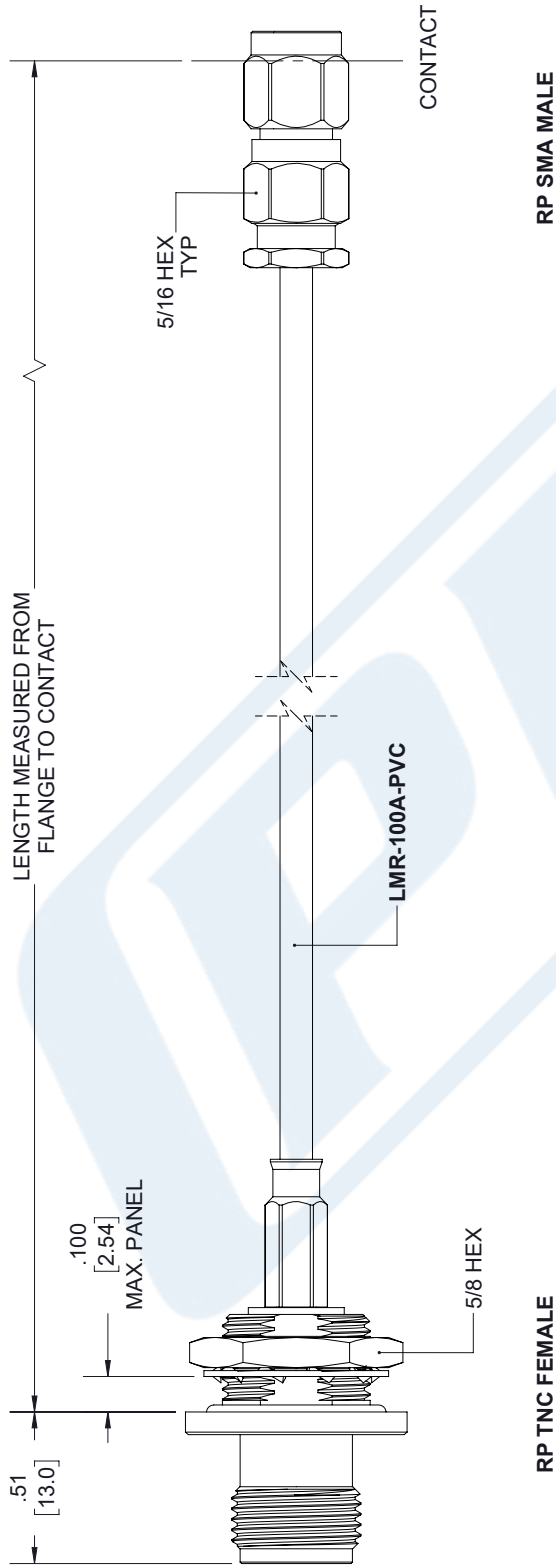
URL:

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# PE3W07758-24 CAD Drawing

Reverse Polarity TNC Female Bulkhead to Reverse Polarity SMA  
Male Cable 24 Inch Length Using LMR-100 Coax

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



|                                                                                                                                                                                                                                                                 |                 |                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------------|
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| <p><b>PE PASTERNAK</b><br/>an INFINITI® brand</p> <p>Pasternack Enterprises, Inc.<br/>P.O. Box 16759, Irvine, CA 92623.<br/>Phone: 1.949.261.1920   1.866.727.8376<br/>Fax: 1.949.261.7451<br/>Website: www.pasternack.com<br/>E-mail: sales@pasternack.com</p> |                 | ITEM NO. PE3W07758 |
| SIZE A                                                                                                                                                                                                                                                          | CAGE CODE 53919 | DRAWN BY K.DANG    |

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

TOLERANCES:

|               |        |                  |
|---------------|--------|------------------|
| .X = ± .2     | [5.08] | 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% L    | / -0 |

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