

## Lead Free 1553 TRB 3-Lug Jack Bulkhead NI to TRB 3-Lug Jack Bulkhead NI Cable 78 Ohm M17/176-00002 Coax in 60 Inch with Bend Relief

The 78 ohm TRB 3-Lug jack bulkhead nonisolated to 78 ohm TRB 3-Lug jack bulkhead nonisolated 60 inch cable using 78 ohm M17/176-00002 twinax, part number FM3MSA00454-60, from Fairview Microwave is in-stock and ships same day. This Fairview TRB 3-Lug to TRB 3-Lug cable assembly has a jack to jack gender configuration with 78 ohm flexible M17/176-00002 twinax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FM3MSA00454-60 TRB 3-Lug jack to TRB 3-Lug jack cable assembly operates to 10 MHz. Our RF cable assembly with TRB 3-Lug bulkhead nonisolated 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.

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 RF cable assembly value added services including connector orientation or clocking, heat shrink booting and labeling are also available. RF testing can also be performed to document the electrical performance of your cable assembly.

### Electrical Specifications

| Description            | Min | Typ        | Max     | Units        |
|------------------------|-----|------------|---------|--------------|
| Frequency Range        | DC  |            | 10      | MHz          |
| Capacitance            |     | 24 [78.74] |         | pF/ft [pF/m] |
| Operating Voltage (AC) |     |            | 750,000 | Vrms         |

### Performance by Frequency

| Description           | F1   | F2    | F3   | F4    | F5    | Units |
|-----------------------|------|-------|------|-------|-------|-------|
| Frequency             | 1    | 3     | 5    | 7     | 10    | MHz   |
| Insertion Loss (Typ.) | 0.27 | 0.305 | 0.34 | 0.375 | 0.425 | dB    |

#### Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1 dB per connector.

### Mechanical Specifications

#### Cable Assembly

|         |                     |
|---------|---------------------|
| Length* | 60 in [152.4 cm]    |
| Weight  | 0.208 lbs [94.35 g] |

#### Cable

|                                      |                      |
|--------------------------------------|----------------------|
| Cable Type                           | M17/176-00002        |
| Impedance                            | 78 Ohms              |
| Inner Conductor Type                 | Stranded             |
| Inner Conductor Material and Plating | Copper, Silver       |
| Dielectric Type                      | PTFE                 |
| Shield Layer 1                       | Silver Plated Copper |
| Jacket Material                      | PFA, Blue            |

|                              |                  |
|------------------------------|------------------|
| One Time Minimum Bend Radius | 1.5 in [38.1 mm] |
|------------------------------|------------------|



### Configuration:

- TRB 3-Lug Jack Bulkhead Non-Isolated
- TRB 3-Lug Jack Bulkhead Non-Isolated
- M17/176-00002

### Features:

- Max Frequency 10 MHz
- PFA Jacket
- MIL-STD-1553
- -55°C to +200°C
- 78 ohms

### Applications:

- General Purpose
- Laboratory Use
- Vehicle High Temperature
- Data
- MIL-STD-1553

Fairview Microwave  
 301 Leora Ln., Suite 100  
 Lewisville, TX 75056  
 Tel: 1-800-715-4396 / (972) 649-6678  
 Fax: (972) 649-6689  
[www.fairviewmicrowave.com](http://www.fairviewmicrowave.com)  
[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

## Connectors

| Description                   | Connector 1                  | Connector 2                  |
|-------------------------------|------------------------------|------------------------------|
| Type                          | TRB 3-Lug Jack Bayonet       | TRB 3-Lug Jack Bayonet       |
| Option                        | Bend Relief Spring           | Bend Relief Spring           |
| Mount Method                  | Bulkhead NonIsolated         | Bulkhead NonIsolated         |
| Impedance                     | 78 Ohms                      | 78 Ohms                      |
| Contact Material & Plating    | Bronze, Gold 30 micro inches | Bronze, Gold 30 micro inches |
| Contact Plating Spec.         | ASTM-B-488                   | ASTM-B-488                   |
| Dielectric Type               | Teflon                       | Teflon                       |
| Outer Cond Material & Plating | Phosphor Bronze, Gold        | Phosphor Bronze, Gold        |
| Outer Cond Plating Spec.      | 30 micro inches              | 30 micro inches              |
| Body Material & Plating       | Brass, Nickel                | Brass, Nickel                |
| Body Plating Spec.            | ASTM-B-733                   | ASTM-B-733                   |

## Environmental Specifications

### Temperature

Operating Range -55 to +200 deg C

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

## Plotted and Other Data

Notes:

## How to Order

Part Number Configuration: **FM3MSA00454 - xx uu**

cm = Centimeters  
 <blank> = Inches  
 Length

Example: FM3MSA00454-12 = 12 inches long cable  
 FM3MSA00454-100cm = 100 cm long cable

Lead Free 1553 TRB 3-Lug Jack Bulkhead NI to TRB 3-Lug Jack Bulkhead NI Cable 78 Ohm M17/176-00002 Coax in 60 Inch with Bend Relief from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Lead Free 1553 TRB 3-Lug Jack Bulkhead NI to TRB 3-Lug Jack Bulkhead NI Cable 78 Ohm M17/176-00002 Coax in 60 Inch with Bend Relief FM3MSA00454-60](#)

URL: <https://www.fairviewmicrowave.com/lead-free-1553-trb-3-lug-jack-bulkhead-ni-to-trb-3-lug-jack-bulkhead-ni-cable-78-ohm-m17-176-00002-coax-in-60-inch-with-bend-relief-fm3msa00454-60-p.aspx>

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