

**1553 TRB 3-Slot Plug to TRB 3-Slot Plug Cable**  
**78 Ohm FMBC-30-02003 Coax with Bend Relief**

The 78 ohm TRB 3-Slot plug to 78 ohm TRB 3-Slot plug cable using 78 ohm FMBC-30-02003 twinax, part number FM3MP2164, from Fairview Microwave is in-stock and ships same day. This Fairview TRB 3-Slot to TRB 3-Slot cable assembly has a plug to plug gender configuration with 78 ohm flexible FMBC-30-02003 twinax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FM3MP2164 TRB 3-Slot plug to TRB 3-Slot plug cable assembly operates to 500 MHz. The FM3MP2164 cable assembly consists of a 3-slot solder/clamp TRB plug with Bend Relief to 3-slot solder/clamp TRB plug with Bend Relief for FMBC-30-02003, that is a standard lab-rated PVC cable for MIL-STD-1553 applications, with an O.D. 0.150". These cable assemblies come with a 1.700" steel spring-style bend relief that helps to minimize cable damage when exceeding the cables minimum bend radius. These assemblies are built to withstand severe shocks and vibrations.

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  |             | 500 | MHz          |
| Capacitance            |     | 20.3 [66.6] |     | pF/ft [pF/m] |
| Operating Voltage (AC) |     |             | 300 | Vrms         |

**Performance by Frequency**

| Description           | F1    | F2    | F3    | F4    | F5    | Units |
|-----------------------|-------|-------|-------|-------|-------|-------|
| Frequency             | 10    | 50    | 100   | 200   | 500   | MHz   |
| Insertion Loss (Typ.) | 0.053 | 0.119 | 0.168 | 0.237 | 0.375 | dB/ft |
|                       | 0.17  | 0.39  | 0.55  | 0.78  | 1.23  | dB/m  |

**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* | 0 in [0 mm]        |
| Weight  | 0.3 lbs [136.08 g] |

**Cable**

|                                      |                      |
|--------------------------------------|----------------------|
| Cable Type                           | FMBC-30-02003        |
| Impedance                            | 78 Ohms              |
| Inner Conductor Type                 | Stranded             |
| Inner Conductor Material and Plating | Copper, Silver       |
| Dielectric Type                      | PE                   |
| Shield Layer 1                       | Silver Plated Copper |


**Configuration:**

- TRB 3-Slot Plug
- TRB 3-Slot Plug
- FMBC-30-02003

**Features:**

- Max Frequency 500 MHz
- PVC Jacket
- MIL-STD-1553
- -20°C to +75°C
- 78 ohms
- Lab rated
- Bend Relief

**Applications:**

- General Purpose
- Laboratory Use
- MIL-STD-1553
- Data
- Lab applications

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Jacket Material PVC, Blue  
One Time Minimum Bend Radius 1.5 in [38.1 mm]

**Connectors**

| Description                   | Connector 1                  | Connector 2                  |
|-------------------------------|------------------------------|------------------------------|
| Type                          | TRB 3-Slot Plug Bayonet      | TRB 3-Slot Plug Bayonet      |
| Option                        | Bend Relief Spring           | Bend Relief Spring           |
| 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 -20 to +75 deg C

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

**Plotted and Other Data**

Notes:

**How to Order**

Part Number Configuration:

**FM3MP2164 - xx uu**

cm = Centimeters  
<blank> = Inches  
Length

Example: FM3MP2164-12 = 12 inches long cable  
FM3MP2164-100cm = 100 cm long cable

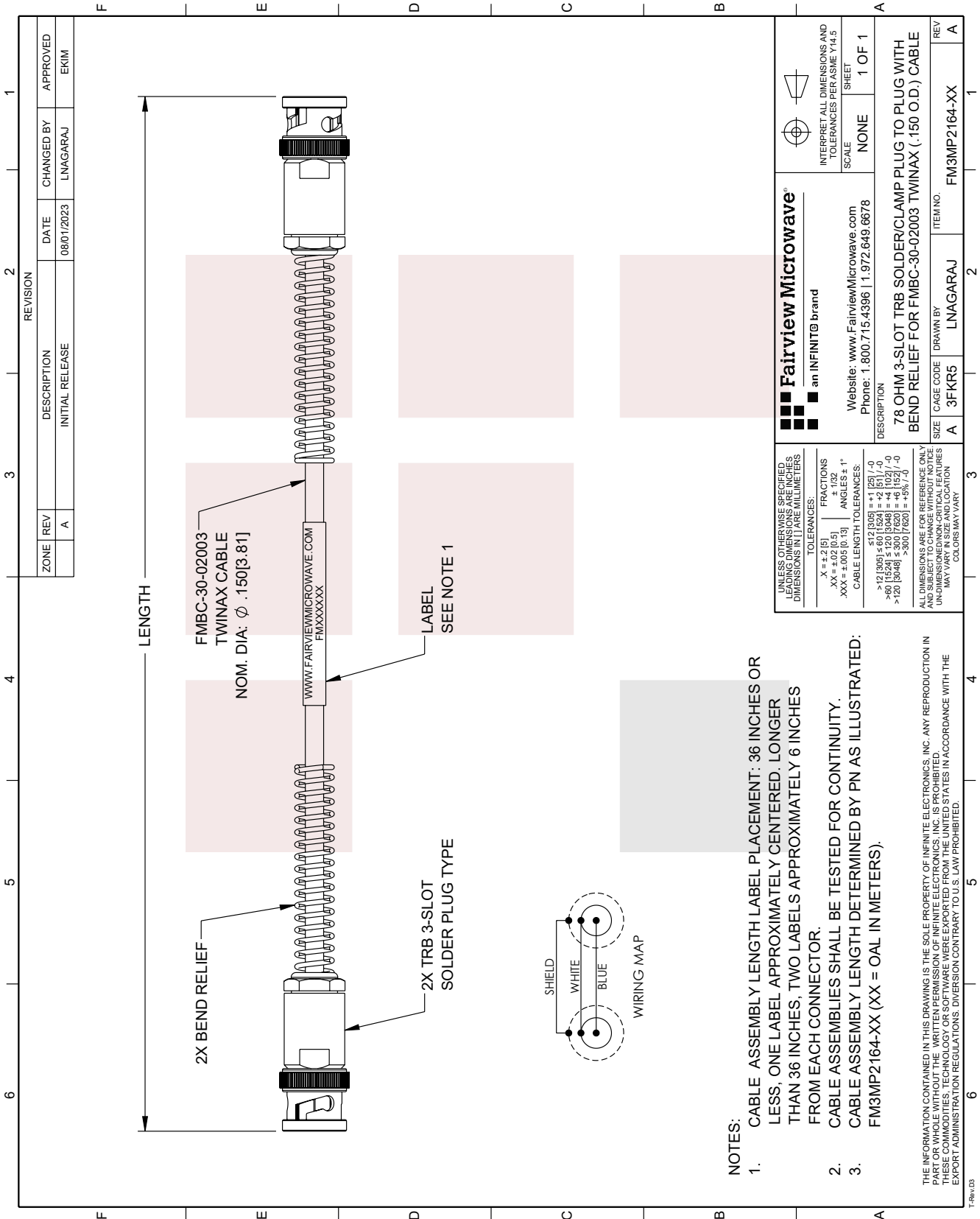
1553 TRB 3-Slot Plug to TRB 3-Slot Plug Cable 78 Ohm FMBC-30-02003 Coax with Bend Relief from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [1553 TRB 3-Slot Plug to TRB 3-Slot Plug Cable 78 Ohm FMBC-30-02003 Coax with Bend Relief FM3MP2164](https://www.fairviewmicrowave.com/1553-trb-3-slot-plug-to-trb-3-slot-plug-cable-78-ohm-fmbc-30-02003-coax-with-bend-relief-fm3mp2164)

URL: <https://www.fairviewmicrowave.com/1553-trb-3-slot-plug-to-trb-3-slot-plug-cable-78-ohm-fmbc-30-02003-coax-with-bend-relief-fm3mp2164-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.





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|---|--|--|
| <b>Fairview Microwave</b><br>an INFINIT <sup>®</sup> brand<br>Website: <a href="http://www.FairviewMicrowave.com">www.FairviewMicrowave.com</a><br>Phone: 1.800.715.4396   1.972.649.6678 |  | INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5<br>SCALE: NONE<br>SHEET: 1 OF 1 |
| DESCRIPTION<br><b>78 OHM 3-SLOT TRB SOLDER/CLAMP PLUG TO PLUG WITH BEND RELIEF FOR FMBC-30-02003 TWINAX (.150 O.D.) CABLE</b>   |  |  |
| SIZE: A<br>CAGE CODE: 3FKR5<br>DRAWN BY: LNAGARAJ<br>ITEM NO.: FM3MP2164-XX<br>REV: A   |  |  |

|   |  |
|---|--|
| UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES, DIMENSIONS IN [ ] ARE MILLIMETERS<br>TOLERANCES:<br>.X = ±.2 [5]<br>.XX = ±.02 [0.5]<br>.XXX = ±.005 [0.13]<br>ANGLES ± 1°<br>CABLE LENGTH TOLERANCES:<br>>12 [305] ≤ 60 [1524] = ±.01 [0.25] / -0<br>>60 [1524] ≤ 120 [3048] = ±.02 [0.51] / -0<br>>120 [3048] ≤ 300 [7620] = ±.04 [1.02] / -0<br>>300 [7620] = ±.06 [1.52] / -0 | ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE<br>UN-DIMENSIONED CRITICAL FEATURES MAY VARY<br>COLORS MAY VARY |
|---|--|

- NOTES:**
- CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED, LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
  - CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
  - CABLE ASSEMBLY LENGTH DETERMINED BY PN AS ILLUSTRATED: FM3MP2164-XX (XX = OAL IN METERS).

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