

## 1553 TRB 3-Slot Plug to TRB 3-Lug Jack Bulkhead Cable 78 Ohm FMBC-30-02003 Coax in 12 Inch with Bend Relief with LF Solder

The 78 ohm TRB 3-Slot plug to 78 ohm TRB 3-Lug jack bulkhead 12 inch cable using 78 ohm FMBC-30-02003 twinax, part number FM3MSA00478-12, from Fairview Microwave is in-stock and ships same day. This Fairview TRB 3-Slot to TRB 3-Lug cable assembly has a plug to jack 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 FM3MSA00478-12 TRB 3-Slot plug to TRB 3-Lug jack cable assembly operates to 500 MHz. Our RF cable assembly with TRB 3-Lug 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 FM3MSA00478 it's a Lead Free assembly consisting of a Bend Relief 3-slot solder/clamp TRB plug to a Bend Relief 3-Lug TRB Solder/Clamp Non-Insulated Bulk Head Jack for FMBC-30-02003, that is a standard lab-rated PVC cable for MIL-STD-1553 applications. 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.)	0.253	0.319	0.368	0.437	0.575	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*	12 in [304.8 mm]
Weight	0.3 lbs [136.08 g]

#### Cable

Cable Type	FMBC-30-02003
Impedance	78 Ohms
Inner Conductor Type	Stranded



### Configuration:

- TRB 3-Slot Plug
- TRB 3-Lug Jack Bulkhead
- FMBC-30-02003

### Features:

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

### Applications:

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

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Inner Conductor Material and Plating      Copper, Silver  
Dielectric Type                                      PE  
Shield Layer 1                                      Silver Plated Copper  
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-Lug Jack Bayonet
Option	Bend Relief Spring	Non-Insulated, Bend Relief Spring
Mount Method		Bulkhead
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:

**FM3MSA00478 - xx uu**

cm = Centimeters  
<blank> = Inches  
Length

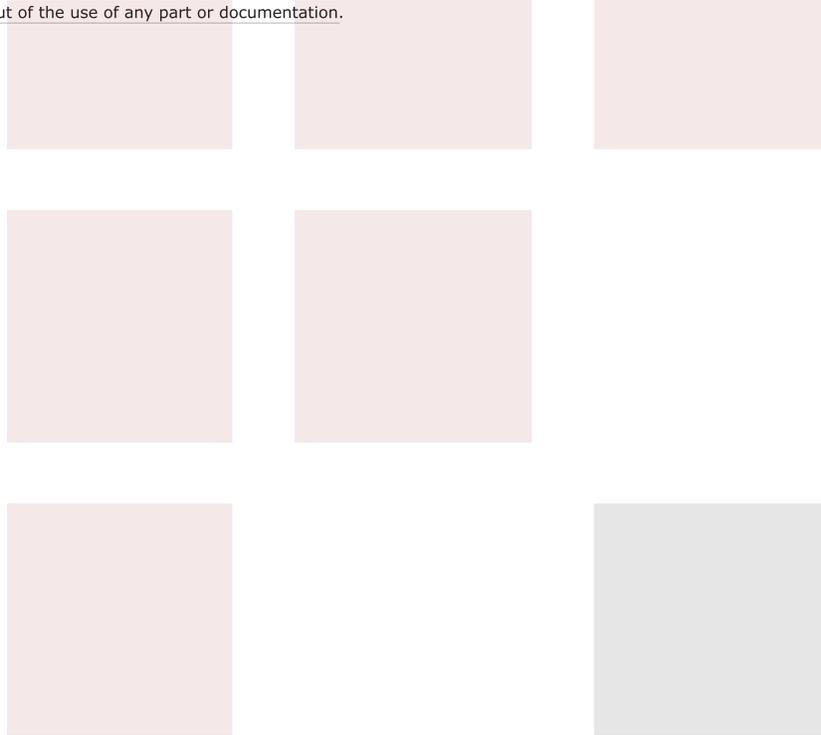
Example: FM3MSA00478-12 = 12 inches long cable  
FM3MSA00478-100cm = 100 cm long cable

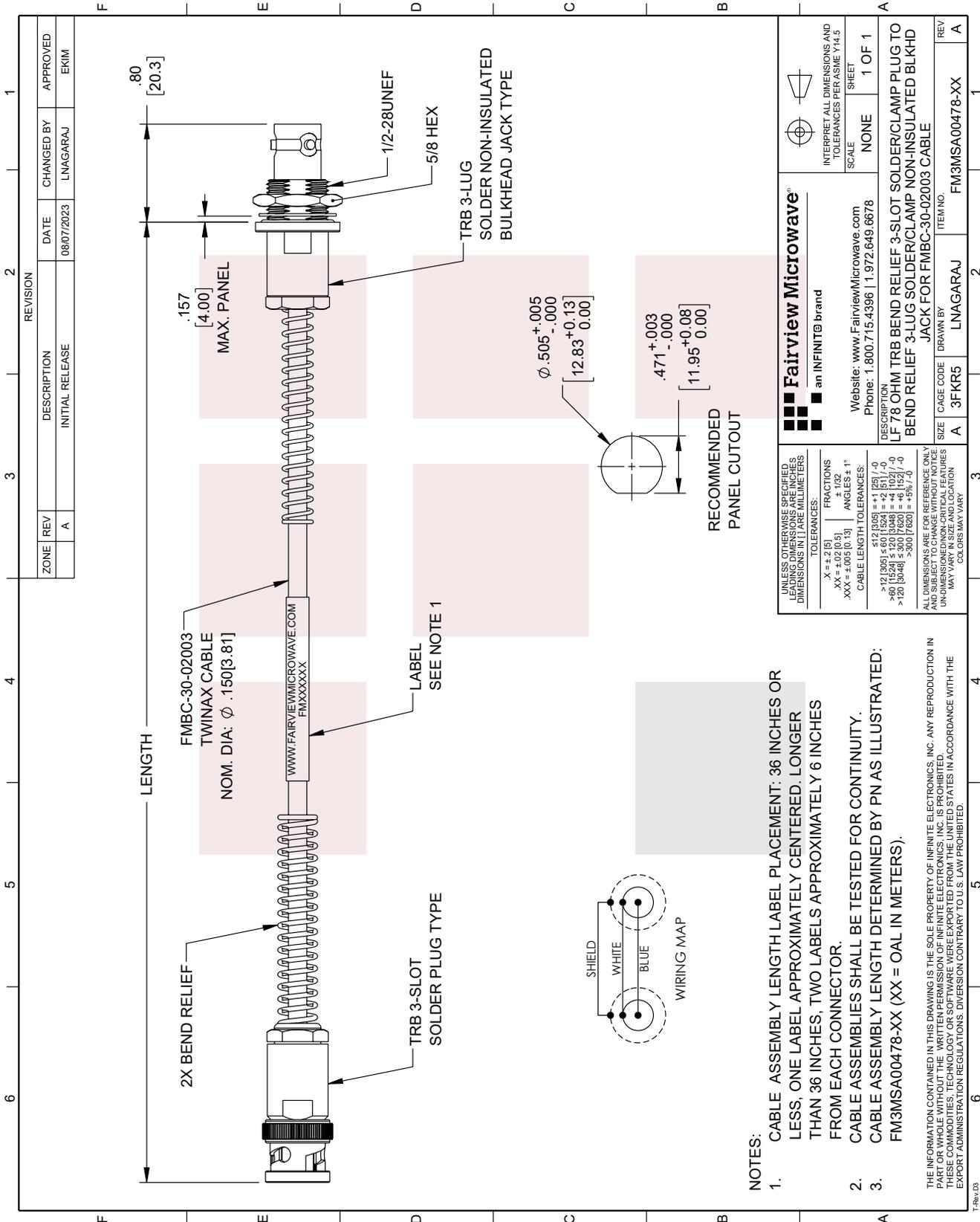
1553 TRB 3-Slot Plug to TRB 3-Lug Jack Bulkhead Cable 78 Ohm FMBC-30-02003 Coax in 12 Inch with Bend Relief with LF Solder from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [1553 TRB 3-Slot Plug to TRB 3-Lug Jack Bulkhead Cable 78 Ohm FMBC-30-02003 Coax in 12 Inch with Bend Relief with LF Solder FM3MSA00478-12](https://www.fairviewmicrowave.com/1553-trb-3-slot-plug-to-trb-3-lug-jack-bulkhead-cable-78-ohm-fm3msa00478-12)

URL: <https://www.fairviewmicrowave.com/1553-trb-3-slot-plug-to-trb-3-lug-jack-bulkhead-cable-78-ohm-fm3msa00478-12-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.





- NOTES:**
1. 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.
  2. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
  3. CABLE ASSEMBLY LENGTH DETERMINED BY PN AS ILLUSTRATED: FM3MSA00478-XX (XX = OAL IN METERS).

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UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE INCHES, DIMENSIONS IN [ ] ARE MILLIMETERS	
TOLERANCES:	FRACTIONS:
.XX = ±.02 [0.51]	± 1/32
.XXX = ±.005 [0.13]	ANGLES ± 1°
CABLE LENGTH TOLERANCES:	
> 12 [305] ≤ 60 [1524] = ±.015 [0.38]	±.12 [3.05] = +1 [25] / -0
> 60 [1524] ≤ 120 [3048] = ±.030 [0.762]	±.025 [0.635] = +2 [51] / -0
	±.030 [0.762] = +6 [152] / -0
	> 120 [3048] = ±.030 [0.762] = +5% / -0
ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE	
UN-DIMENSIONED NON-CRITICAL FEATURES MAY VARY IN DIMENSION	
COLORS MAY VARY	

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DESCRIPTION: BEND RELIEF 3-LUG SOLDER/CLAMP NON-INSULATED BLKHD JACK FOR FMBC-30-02003 CABLE		ITEM NO.: FM3MSA00478-XX REV: A
SIZE: A CAGE CODE: 3FKR5 DRAWN BY: LNAGARAJ	ITEM NO.: FM3MSA00478-XX REV: A	SCALE: NONE SHEET: 1 OF 1