

1553 TRB 3-Slot Plug to TRB 3-Lug Jack Cable 78 Ohm FMBC-30-02001 Coax in 48 Inch with LF Solder

The 78 ohm TRB 3-Slot plug to 78 ohm TRB 3-Lug jack 48 inch cable using 78 ohm FMBC-30-02001 twinax, part number FM3MSA00542-48, 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-30-02001 twinax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FM3MSA00542-48 TRB 3-Slot plug to TRB 3-Lug jack cable assembly operates to 400 MHz. The FM3MSA00542 it's a Lead Free cable assembly consisting of a 3-slot solder/clamp TRB plug to a 3-Lug TRB Solder/Clamp Jack for FMBC-30-02001; that offer a lower-cost, lab-rated PVC cabling solution for laboratory implementations for MIL-STD-1553 applications. It features a larger diameter cable (0.242" O.D.)

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		400	MHz
Capacitance		19.7 [64.63]		pF/ft [pF/m]
Operating Voltage (AC)			1,000	Vrms

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	10	50	100	200	400	MHz
Insertion Loss (Typ.)	0.29	0.4	0.5	0.64	0.84	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*	48 in [121.92 cm]
Weight	0.36 lbs [163.29 g]

Cable

Cable Type	FMBC-30-02001
Impedance	78 Ohms
Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper, Silver
Dielectric Type	PE
Shield Layer 1	Silver Plated Copper
Jacket Material	PVC, Blue



Configuration:

- TRB 3-Slot Plug
- TRB 3-Lug Jack
- FMBC-30-02001

Features:

- Max Frequency 400 MHz
- PVC Jacket
- MIL-STD-1553
- -20°C to +75°C
- 78 ohms
- Lab rated

Applications:

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

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One Time Minimum Bend Radius 2.42 in [61.47 mm]

Connectors

Description	Connector 1	Connector 2
Type	TRB 3-Slot Plug Bayonet	TRB 3-Lug Jack Bayonet
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: **FM3MSA00542 - xx uu**



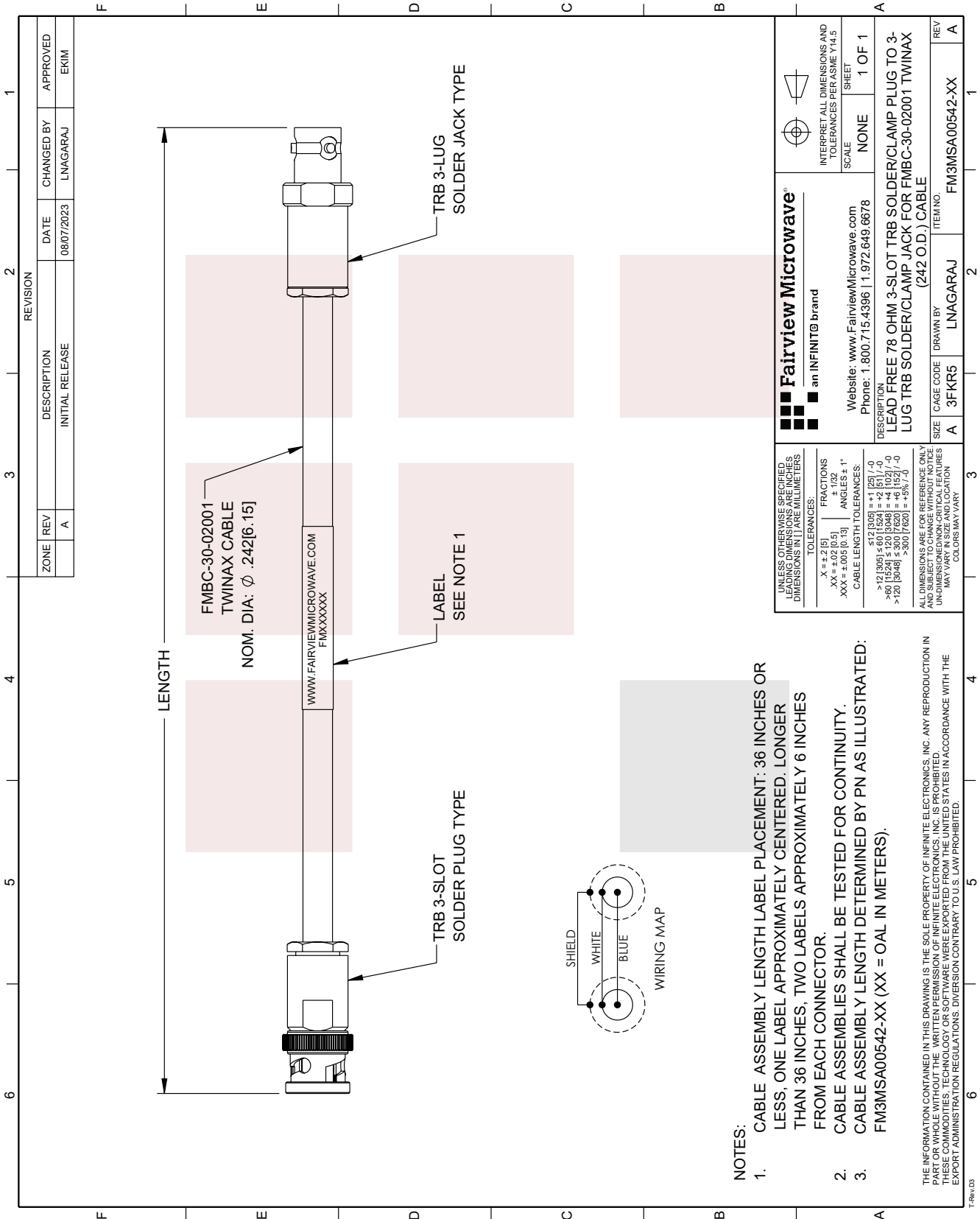
Example: FM3MSA00542-12 = 12 inches long cable
FM3MSA00542-100cm = 100 cm long cable

1553 TRB 3-Slot Plug to TRB 3-Lug Jack Cable 78 Ohm FMBC-30-02001 Coax in 48 Inch 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 Cable 78 Ohm FMBC-30-02001 Coax in 48 Inch with LF Solder FM3MSA00542-48](#)

URL: <https://www.fairviewmicrowave.com/1553-trb-3-slot-plug-to-trb-3-lug-jack-cable-78-ohm-fm3msa00542-48-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.



REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV			
	A	08/07/2023	LNAGARAJ	EKIM
DESCRIPTION				
INITIAL RELEASE				

Fairview Microwave
an INFINIT[®] brand

Website: www.FairviewMicrowave.com
Phone: 1.800.715.4396 | 1.972.649.6678

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5
SCALE NONE SHEET 1 OF 1

DESCRIPTION
LEAD FREE 78 OHM 3-SLOT TRB SOLDER/CLAMP PLUG TO 3-LEAD FREE 78 OHM 3-SLOT TRB SOLDER/CLAMP JACK FOR FMBC-30-02001 TWINAX LUG TRB SOLDER/CLAMP JACK (242 O.D.) CABLE

SIZE A CAGE CODE 3FKR5 DRAWN BY LNAGARAJ ITEM NO. FM3MSA00542-XX REV A

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

TOLERANCES:
X = ± 2 [6]
.XX = ± 0.02 [0.5]
XXX = ± 0.05 [1.3]

FRACTIONS
± 1/32
ANGLES ± 1°

CABLE LENGTH TOLERANCES:
412 [305] = +1 [25] / -0
> 12 [305] ≤ 60 [1524] = ± 2 [51] / -0
> 60 [1524] ≤ 300 [7620] = ± 4 [102] / -0
> 120 [3048] ≤ 300 [7620] = ± 6 [152] / -0
> 300 [7620] = ± 8% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE. UNDIMENSIONED CRITICAL FEATURES MAY VARY FROM DRAWING. DIMENSIONS AND 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: FM3MSA00542-XX (XX = OAL IN METERS).

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