

Lead Free 1553 TRS Subminiature Plug to TRS Subminiature Plug Cable 78 Ohm M17/176-00002 Coax in 48 Inch

The 78 ohm TRS Subminiature plug to 78 ohm TRS Subminiature plug 48 inch cable using 78 ohm M17/176-00002 twinax, part number FM3MSA00457-48, from Fairview Microwave is in-stock and ships same day. This Fairview TRS Subminiature to TRS Subminiature cable assembly has a plug to plug 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 FM3MSA00457-48 TRS Subminiature plug to TRS Subminiature plug cable assembly operates to 10 MHz.

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.)	0.256	0.284	0.312	0.34	0.38	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	0.122 lbs [55.34 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]
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Configuration:

- TRS Subminiature Plug
- TRS Subminiature Plug
- 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

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Connectors

Description	Connector 1	Connector 2
Type	TRS Subminiature Plug Bayonet	TRS Subminiature Plug 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 -55 to +200 deg C

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

Plotted and Other Data

Notes:

How to Order

Part Number Configuration: **FM3MSA00457 - xx uu**

cm = Centimeters
<blank> = Inches

Length

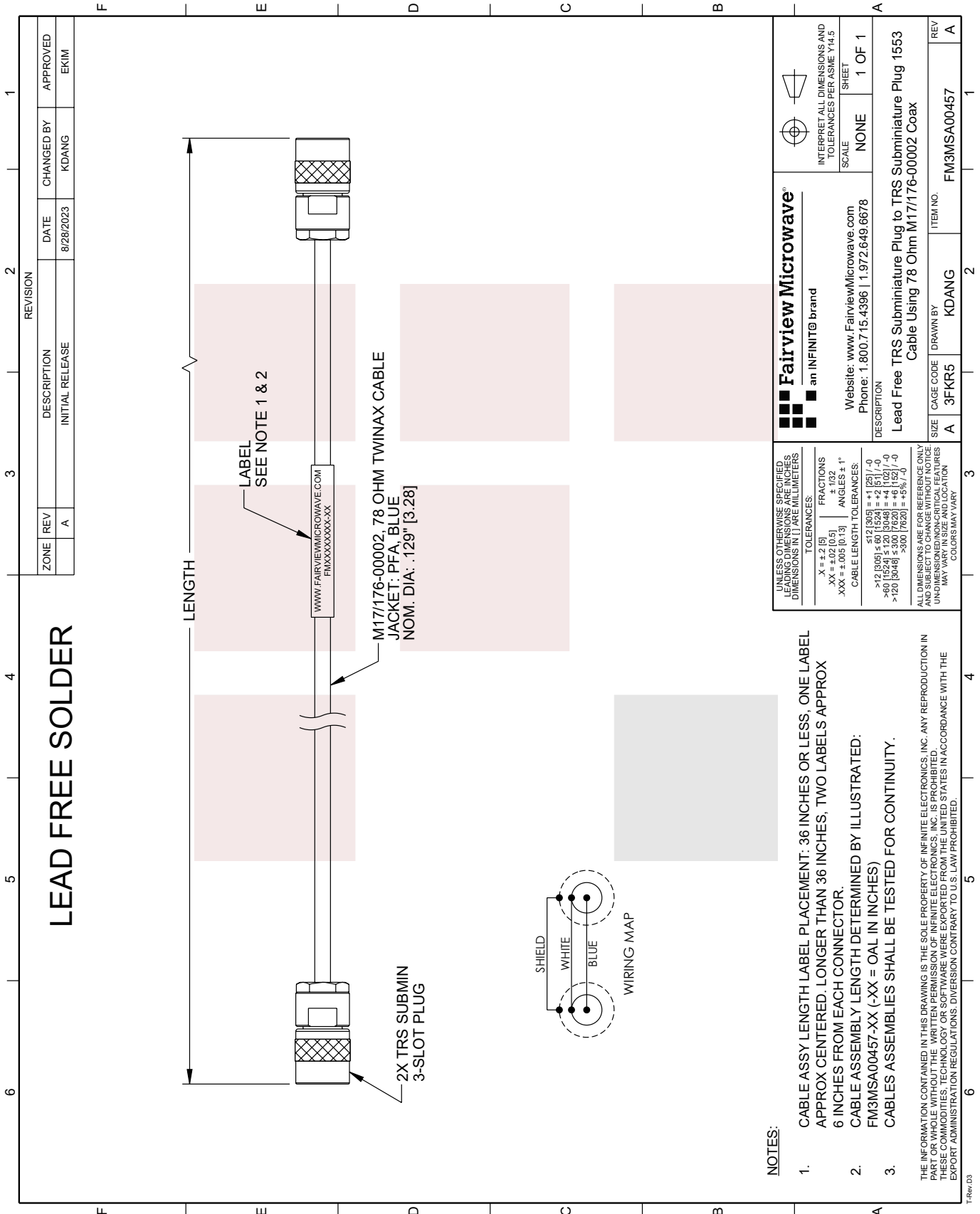
Example: FM3MSA00457-12 = 12 inches long cable
FM3MSA00457-100cm = 100 cm long cable

Lead Free 1553 TRS Subminiature Plug to TRS Subminiature Plug Cable 78 Ohm M17/176-00002 Coax in 48 Inch 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 TRS Subminiature Plug to TRS Subminiature Plug Cable 78 Ohm M17/176-00002 Coax in 48 Inch FM3MSA00457-48](#)

URL: <https://www.fairviewmicrowave.com/lead-free-1553-trs-subminiature-plug-to-trs-subminiature-plug-cable-78-ohm-m17-176-00002-coax-in-48-inch-fm3msa00457-48-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.



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NOTES:

1. CABLE ASSY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROX CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROX 6 INCHES FROM EACH CONNECTOR.
2. CABLE ASSEMBLY LENGTH DETERMINED BY ILLUSTRATED: FM3MSA00457-XX (-XX = OAL IN INCHES)
3. CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE IN INCHES DIMENSIONS IN [] ARE MILLIMETERS	
TOLERANCES:	FRACTIONS
.X = ±.2 [5]	.XX = ±.02 [0.5]
.XXX = ±.005 [0.13]	ANGLES ± 1°
CABLE LENGTH TOLERANCES:	
.512 [305] = ±.1 [25] / -0	
.512 [305] ≤ .560 [1524] = ±.2 [51] / -0	
.560 [1524] ≤ .600 [1524] = ±.3 [76.2] / -0	
.600 [1524] ≤ .650 [1651] = ±.4 [101.6] / -0	
.650 [1651] ≤ .700 [1778] = ±.5 [127] / -0	
.700 [1778] ≤ .800 [2032] = ±.6 [152.4] / -0	
.800 [2032] ≤ 3.00 [76200] = ±.5% / -0	
ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE UNLESS OTHERWISE SPECIFIED. DIMENSIONS MAY VARY IN SIZE AND LOCATION COLORS MAY VARY	

<p>Fairview Microwave an INFINIT[®] brand</p> <p>Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678</p>		<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SHEET</p> <p>SCALE: NONE</p> <p>1 OF 1</p>
<p>DESCRIPTION</p> <p>Lead Free TRS Subminiature Plug to TRS Subminiature Plug 1553 Cable Using 78 Ohm M17176-00002 Coax</p>		
SIZE	CAGE CODE	ITEM NO.
A	3FKR5	FM3MSA00457
REV	DRAWN BY	REV
A	KDANG	A