

Lead Free 1553 TRS Subminiature Plug to TRS Subminiature Plug Cable Assembly using 30-02003-LC Coax, 2 FT



LC3MSA00491-24

Configuration

- Connector 1: TRS Subminiature Plug
- Connector 2: TRS Subminiature Plug
- Cable Type: 30-02003-LC

Features

- MIL-STD-1553
- -20°C to +75°C
- 78 ohms

Applications

- MIL-STD-1553
- Data

Description

L-com's LC3MSA00491-24 is a lead free 1553 TRS subminiature plug to TRS subminiature plug cable assembly using 30-02003-LC coax, 2 FT and ships same-day. These flexible RF cable assemblies are ideal for applications where flexure is required. Our L-com TRS Subminiature to TRS Subminiature cable assembly has a plug to plug gender configuration with 78 Ohm flexible 30-02003-LC series coax and operates to 500 MHz.

Custom versions of this TRS Subminiature plug to TRS Subminiature plug cable, along with the rest of L-com's other RF assemblies, can also be built and shipped same day. Other available RF cable assembly value added services from L-com include connector orientation or clocking, heat shrink booting and custom labeling. RF testing can also be performed to document the electrical performance of your cable assembly. Contact a sales representative for testing or custom RF cable quotes. Part number LC3MSA00491-24 L-com Lead Free 1553 TRS Subminiature Plug to TRS Subminiature Plug Cable Assembly using 30-02003-LC Coax, 2 FT data sheet PDF includes details of the RF product specifications, CAD drawing(s) and dimensions below.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		500	MHz
Capacitance		20.3 [66.6]		pF/ft [pF/m]
Operating Voltage (AC)			300	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	10	50	100	200	500	MHz
Insertion Loss (Typ.)	0.306	0.438	0.536	0.674	0.95	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.

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Mechanical Specifications

Cable Assembly

Length* 24 in [609.6 mm]
Weight 0.098 lbs [44.45 g]

Cable

Cable Type 30-02003-LC
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

One Time Minimum Bend Radius 1.5 in [38.1 mm]

Connectors

Description	Connector 1	Connector 2
Type	TRS Subminiature Plug	TRS Subminiature Plug
Impedance	78 Ohms	78 Ohms
Contact Material and Plating	Bronze, Gold 30 micro inches	Bronze, Gold 30 micro inches
Contact Plating Specification	ASTM-B-488	ASTM-B-488
Dielectric Type	Teflon	Teflon
Outer Conductor Material and Plating	Phosphor Bronze, Gold	Phosphor Bronze, Gold
Outer Conductor Plating Specification	30 micro inches	30 micro inches
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	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

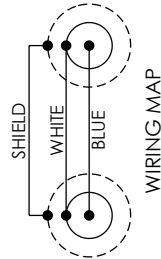
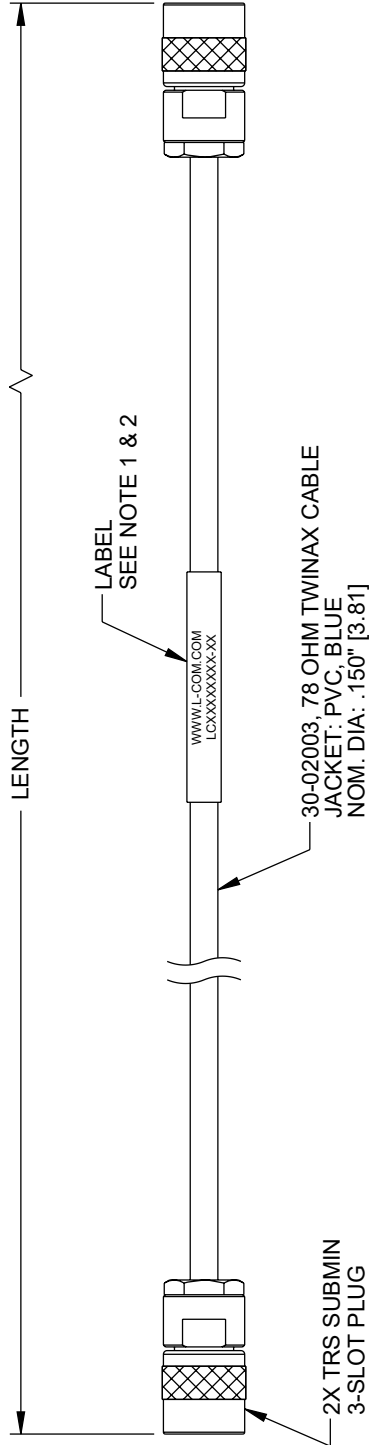
Notes:

Lead Free 1553 TRS Subminiature Plug to TRS Subminiature Plug Cable Assembly using 30-02003-LC Coax, 2 FT

L-com CAD Drawing

ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	8/25/2023	KDANG	EKIM

LEAD FREE SOLDER



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: LC3MSA00491-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:	
.X = ±.2 [5]	FRACTIONS ± 1/32
.XX = ±.02 [0.5]	ANGLES ± 1°
.XXX = ±.005 [0.13]	
CABLE LENGTH TOLERANCES:	
<12 [305]	±.125 [-0]
>12 [305] < 60 [1524]	±.25 [-0]
>60 [1524] < 120 [3048]	±.5 [-0]
>120 [3048]	±.75 [-0]
>300 [7620]	±.5% [-0]
ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE UNLESS DIMENSIONS ON CRITICAL FEATURES MAY VARY. COLORS MAY VARY.	

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

DESCRIPTION	Lead Free TRS Subminiature Plug to Plug for 30-02003-LC Cable
SIZE	A
CAGE CODE	43321
DRAWN BY	KDANG
ITEM NO.	LC3MSA00491
REV	A