

## Halogen Free 1553 TRB 3-Slot Plug to TRB 3-Lug Jack Bulkhead Cable Assembly using TWCH-78-2-LC Coax, 4 FT



### LC3MSA00227-48

#### Configuration

- Connector 1: TRB 3-Slot Plug
- Connector 2: TRB 3-Lug Jack Bulkhead
- Cable Type: TWCH-78-2-LC

#### Features

- MIL-STD-1553
- -30°C to +80°C
- 78 ohms
- Halogen Free
- Non-Toxic
- Non-Insulated Bulkhead

#### Applications

- Military Contractors
- MIL-STD-1553
- Data

#### Description

L-com's LC3MSA00227-48 is a halogen free 1553 TRB 3-Slot plug to TRB 3-Lug jack bulkhead cable assembly using TWCH-78-2-LC coax, 4 FT and ships same-day. These flexible RF cable assemblies are ideal for applications where flexure is required. Our L-com TRB 3-Slot to TRB 3-Lug cable assembly has a plug to jack gender configuration with 78 Ohm flexible TWCH-78-2-LC series coax and operates to 500 MHz. L-com's RF cable assembly with TRB 3-Lug bulkhead interface enables system designers to have external connections on their product enclosures or to be used for other rack mount and panel mount applications. The LC3MSA00227 cable assembly consists of a 78 Ohm Halogen Free 3-Slot TRB Solder/Clamp Plug to 3-Lug TRB Solder/Clamp Non-Insulated Bulk Head Jack for TWCH-78-2 cable (.242 O.D.) suitable for MIL-STD-1553 Applications. The zero halogen jacket cable reduces the amount of toxic and corrosive gases emitted during combustion. Typically used in poorly ventilated areas, zero halogen is very popular with military contractors and anywhere the protection of people and equipment from toxic and corrosive gases is critical.

Custom versions of this TRB 3-Slot plug to TRB 3-Slot jack 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 LC3MSA00227-48 L-com Halogen Free 1553 TRB 3-Slot Plug to TRB 3-Lug Jack Bulkhead Cable Assembly using TWCH-78-2-LC Coax, 4 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		21.2 [69.55]		pF/ft [pF/m]
Operating Voltage (AC)			1,000	Vrms

#### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	10	50	100	200	500	MHz
Insertion Loss (Typ.)	0.29	0.41	0.5	0.62	0.84	dB

Halogen Free 1553 TRB 3-Slot Plug to TRB 3-Lug Jack Bulkhead  
Cable Assembly using TWCH-78-2-LC Coax, 4 FT



## LC3MSA00227-48

### 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	0.4 lbs [181.44 g]

#### Cable

Cable Type	TWCH-78-2-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	HF POF, Blue

One Time Minimum Bend Radius	1.25 in [31.75 mm]
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### Connectors

Description	Connector 1	Connector 2
Type	TRB 3-Slot Plug	TRB 3-Lug Jack Bulkhead
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	-30 to +80 deg C
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## LC3MSA00227-48

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

### Plotted and Other Data

Notes:

### How to Order

Part Number Configuration:

**LC3MSA00227**

**- xx**

**uu**

Unit of Measure:  
cm = Centimeters  
<blank> = Inches

Length

Base Number

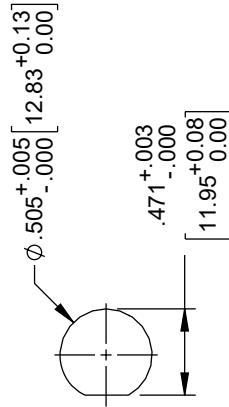
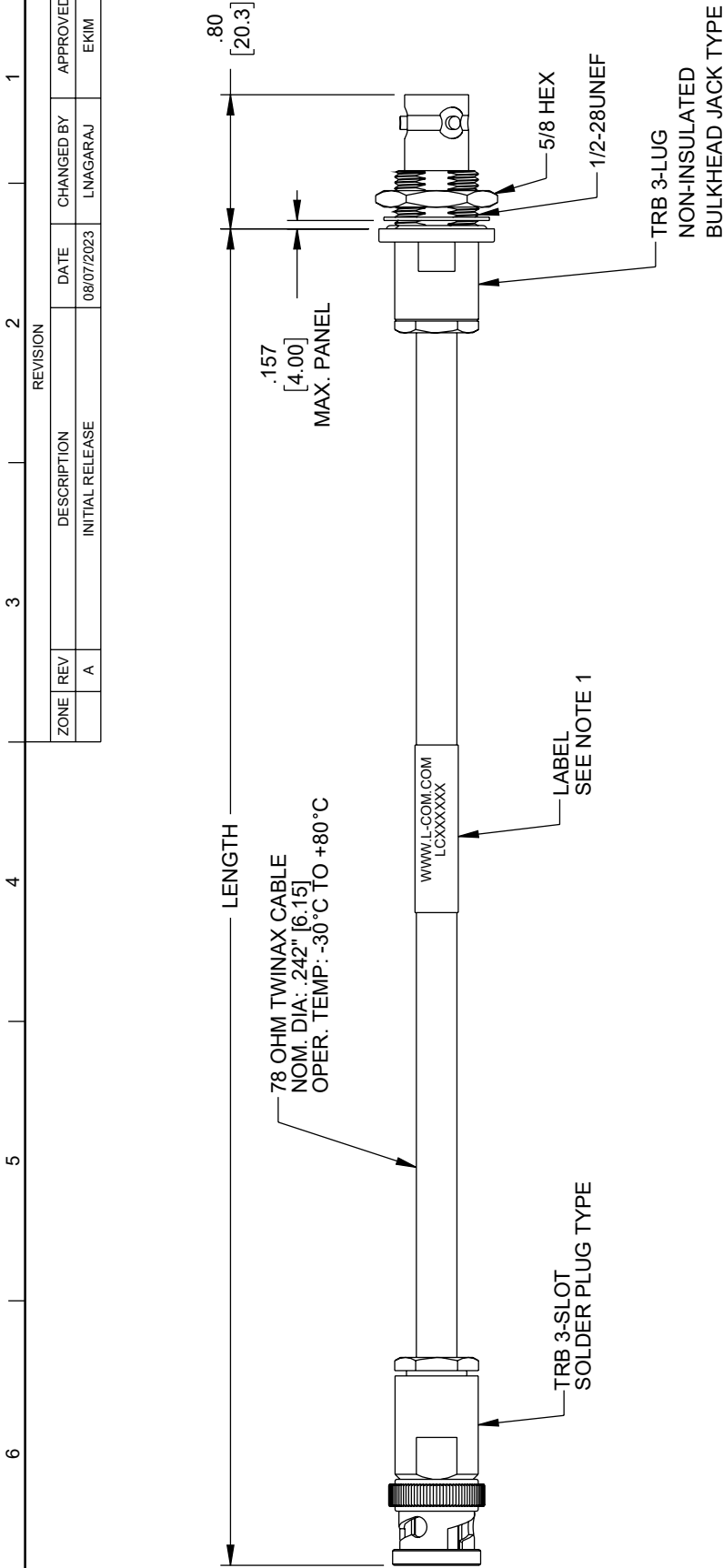
Example: LC3MSA00227-12 = 12 inches long cable  
LC3MSA00227-100cm = 100 cm long cable

Halogen Free 1553 TRB 3-Slot Plug to TRB 3-Lug Jack Bulkhead Cable Assembly using TWCH-78-2-LC Coax, 4 FT from L-com has same day shipment for domestic and International orders. L-com is a leading manufacturer of wired and wireless connectivity products and committed to in-stock availability and same day shipping. Our portfolio includes coaxial cable assemblies, connectors, adapters and custom products as well as lightning and surge protectors, NEMA rated enclosures, and an RF product line which includes antennas, amplifiers, passive, and active components.

The information contained within 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. L-com reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. L-com does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and L-com does not assume liability arising out of the use of any part or document. The information contained within 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. L-com reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. L-com does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and L-com does not assume liability arising out of the use of any part or document.

Halogen Free 1553 TRB 3-Slot Plug to TRB 3-Lug Jack Bulkhead  
Cable Assembly using TWCH-78-2-LC Coax, 4 FT

L-com CAD Drawing



RECOMMENDED  
PANEL CUTOUT

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: LC3MSA00227-XX (XX = OAL IN METERS).

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UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE MILLIMETERS.		L-com <sup>®</sup> an INFINITE <sup>®</sup> brand Website: <a href="http://www.L-com.com">www.L-com.com</a> Phone: 1.800.341.5266   1.978.682.6936		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	
TOLERANCES:		SCALE		SHEET	
X = ±.2 [5]		NONE		1 OF 1	
XX = ±.02 [0.5]					
XXX = ±.005 [0.13]					
CABLE LENGTH TOLERANCES:					
>12 [305] ≤ 60 [1524] = ±.125 [-.0]					
>60 [1524] ≤ 120 [3048] = ±.102 [-.0]					
>120 [3048] ≤ 300 [7620] = ±.092 [-.0]					
>300 [7620] = ±.092 [-.0]					
ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE UNLESS SPECIFIED OTHERWISE. DIMENSIONS MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.		DESCRIPTION		ITEM NO.	
		HALOGEN FREE TRB PLUG TO TRB JACK NON-INSULATED BULKHEAD 1553 CABLE USING 78 OHM TWCH-78-2 COAX		LC3MSA00227-XX	
SIZE		CAGE CODE		DRAWN BY	
A		43321		LNAGARAJ	
REV				A	