



TRB 3-Slot Plug to TRB 3-Lug Jack Insulated Bulkhead
1553 Cable Using 124 Ohm TWC-124-2 Coax Bend Relief Spring

RF Cable Assemblies Technical Data Sheet

PE3MSA00659

Configuration

- Connector 1: TRB 3-Slot Plug
- Connector 2: TRB 3-Lug Jack Insulated Bulkhead
- Cable Type: TWC-124-2
- Coax Flex Type: Flexible

Features

- Max Frequency 500 MHz
- PVC Jacket
- 124 ohms
- Twinaxial
- MIL-STD-1553B
- -40°C to +80°C
- Lead Free Solder
- Standard and Custom Lengths Available

Applications

- General Purpose
- Laboratory Use
- MIL-STD-1553B Applications
- Data Transmission

Description

Pasternack's PE3MSA00659 78 ohm TRB 3-Slot plug to 78 ohm TRB 3-Lug jack insulated bulkhead cable using 124 ohm TWC-124-2 twinax is part of our full line of RF components available for same-day shipping. Pasternack's flexible RF cable assemblies are ideal for applications where tight bends and flexure are required. This Pasternack TRB 3-Slot to TRB 3-Lug cable assembly has a plug to jack gender configuration with 124 ohm flexible TWC-124-2 twinax. The PE3MSA00659 TRB 3-Slot plug to TRB 3-Lug jack cable assembly operates to 500 MHz. Our RF cable assembly with TRB 3-Lug insulated 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.

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 available RF cable assembly value added services 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [TRB 3-Slot Plug to TRB 3-Lug Jack Insulated Bulkhead 1553 Cable Using 124 Ohm TWC-124-2 Coax Bend Relief Spring PE3MSA00659](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		500	MHz
Capacitance		12.3 [40.35]		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.)	0.017	0.036	0.051	0.072	0.114	dB/ft
	0.06	0.12	0.17	0.24	0.37	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

Weight 0.1928 lbs [87.45 g]

Cable

Cable Type TWC-124-2
Impedance 124 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 1.25 in [31.75 mm]

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Connectors

Description	Connector 1	Connector 2
Type	TRB 3-Slot Plug Bayonet	TRB 3-Lug Jack Insulated Bulkhead Bayonet
Option	Bend Relief Spring	Bend Relief Spring
Specification	MIL-STD-1553	MIL-STD-1553
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

-40 to +80 deg C

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

Plotted and Other Data

Notes:

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PE3MSA00659

How to Order

Part Number Configuration:

PE3MSA00659

- **xx**

uu

Unit of Measure:
cm = Centimeters
<blank> = Inches
Length
Base Number

Example: PE3MSA00659-12 = 12 inches long cable
PE3MSA00659-100cm = 100 cm long cable

TRB 3-Slot Plug to TRB 3-Lug Jack Insulated Bulkhead 1553 Cable Using 124 Ohm TWC-124-2 Coax Bend Relief Spring from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [TRB 3-Slot Plug to TRB 3-Lug Jack Insulated Bulkhead 1553 Cable Using 124 Ohm TWC-124-2 Coax Bend Relief Spring PE3MSA00659](#)

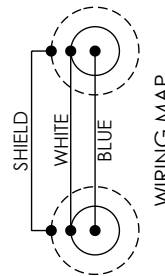
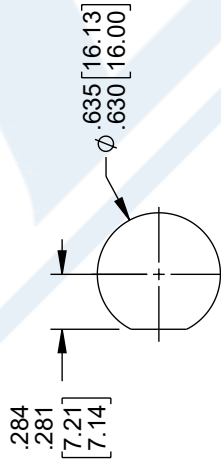
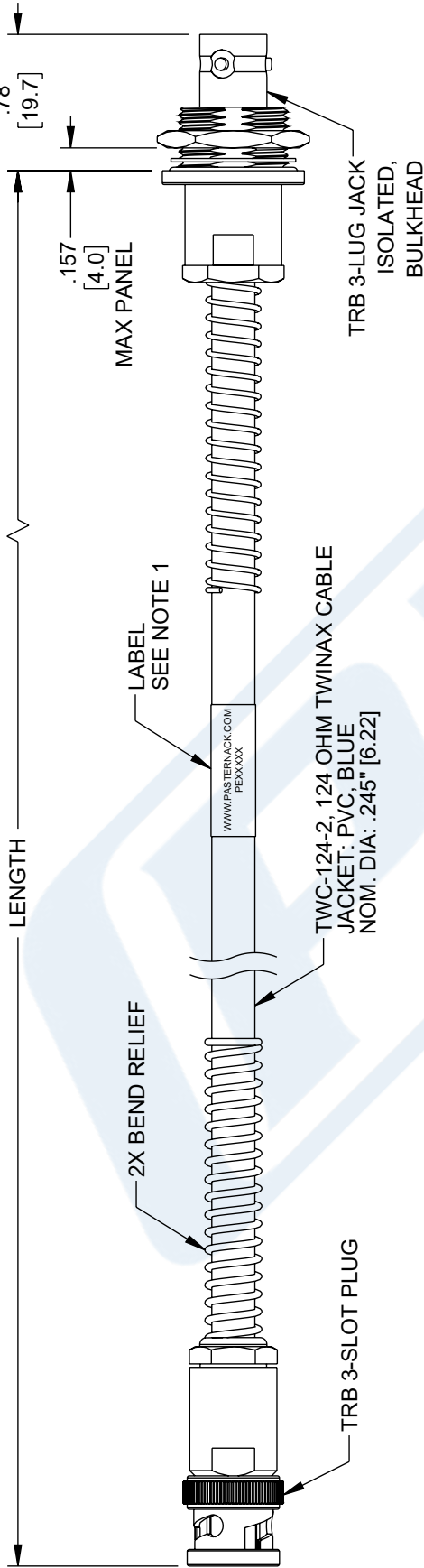
URL: <https://www.pasternack.com/trb-3-slot-plug-to-trb-3-lug-jack-insulated-bulkhead-1553-cable-using-twc-124-2-pe3msa00659-p.aspx>

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. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

PE3MSA00659 CAD Drawing

TRB 3-Slot Plug to TRB 3-Lug Jack Insulated Bulkhead 1553 Cable
Using 124 Ohm TWC-124-2 Coax Bend Relief Spring

LEAD FREE SOLDER



ITEM NUMBER	LENGTH	
	FEET	METERS
PE3MSA00659-12	1.0	.31
PE3MSA00659-24	2.0	.61
PE3MSA00659-36	3.0	.92
PE3MSA00659-48	4.0	1.22
PE3MSA00659-60	5.0	1.52

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.

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Website: www.Pasternack.com
Phone: 1.866.727.8376 | 1.949.261.1920

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE

SHEET: 1 OF 1

DESCRIPTION: ROHS LAB RATED 124 OHM 1553 TWINAX TRB PLUG BR - BULKHEAD INS JACK BR

ITEM NO. PE3MSA00659

REV. A

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

TOLERANCES:

X = ±.2 [5] FRACTIONS
XX = ±.02 [.5] ±.1/32
XXX = ±.005 [.13] ANGLES ± 1°

CABLE LENGTH TOLERANCES:

≤12 [305] = ±.1 [25] / -0
>12 [305] ≤ 60 [1524] = ±.2 [5] / -0
>60 [1524] ≤ 120 [3048] = ±.4 [102] / -0
>120 [3048] ≤ 300 [7620] = ±.6 [152] / -0
>300 [7620] = ±.5% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE.