



Lead Free 78 Ohm TRB 3-Slot Solder/Clamp Plug to 3-Lug
Solder/Clamp Insulated Bulk Head Jack for PE-30-02003 Cable

RF Cable Assemblies Technical Data Sheet

PE3MSA00474

Configuration

- Connector 1: TRB Plug
- Connector 2: TRB Jack Bulkhead
- Cable Type: 30-02003

Features

- Max Frequency 500 MHz
- PVC Jacket
- MIL-STD-1553
- -20°C to +75°C
- 78 ohms
- Lab rated
- Lead Free

Applications

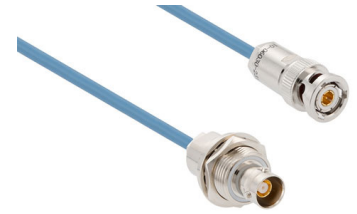
- General Purpose
- Laboratory Use
- MIL-STD-1553
- Data
- Lab applications

Description

Pasternack's PE3MSA00474 78 ohm TRB plug to 78 ohm TRB jack bulkhead cable using 78 ohm PE-30-02003 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 to TRB cable assembly has a plug to jack gender configuration with 78 ohm flexible 30-02003 twinax. The PE3MSA00474 TRB plug to TRB jack cable assembly operates to 500 MHz. Our RF cable assembly with TRB 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. The PE3MSA00474 it's a Lead Free assembly consisting of a 3-slot solder/clamp TRB plug to a 3-Lug TRB Solder/Clamp Insulated Bulk Head Jack for PE-30-02003, that is a standard lab-rated PVC cable for MIL-STD-1553 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: [Lead Free 78 Ohm TRB 3-Slot Solder/Clamp Plug to 3-Lug Solder/Clamp Insulated Bulk Head Jack for PE-30-02003 Twinax \(.150 O.D.\) Cable PE3MSA00474](#)



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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.)	0.053	0.119	0.168	0.237	0.375	dB/ft
	0.17	0.39	0.55	0.78	1.23	dB/m

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

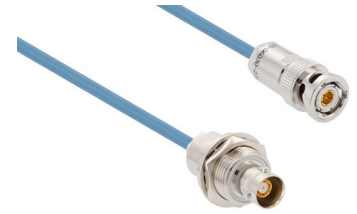
Weight 0.25 lbs [113.4 g]

Cable

Cable Type 30-02003
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]

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Connectors

Description	Connector 1	Connector 2
Type	TRB Plug	TRB 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

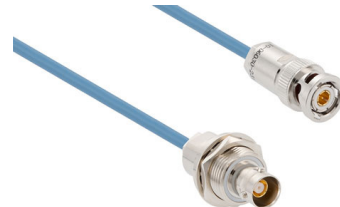
-20 to +75 deg C

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

Plotted and Other Data

Notes:

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RF Cable Assemblies Technical Data Sheet

PE3MSA00474

How to Order

Part Number Configuration:

PE3MSA00474

- **xx**

uu

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

Example: PE3MSA00474-12 = 12 inches long cable
PE3MSA00474-100cm = 100 cm long cable

Lead Free 78 Ohm TRB 3-Slot Solder/Clamp Plug to 3-Lug Solder/Clamp Insulated Bulk Head Jack for PE-30-02003 Cable 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.

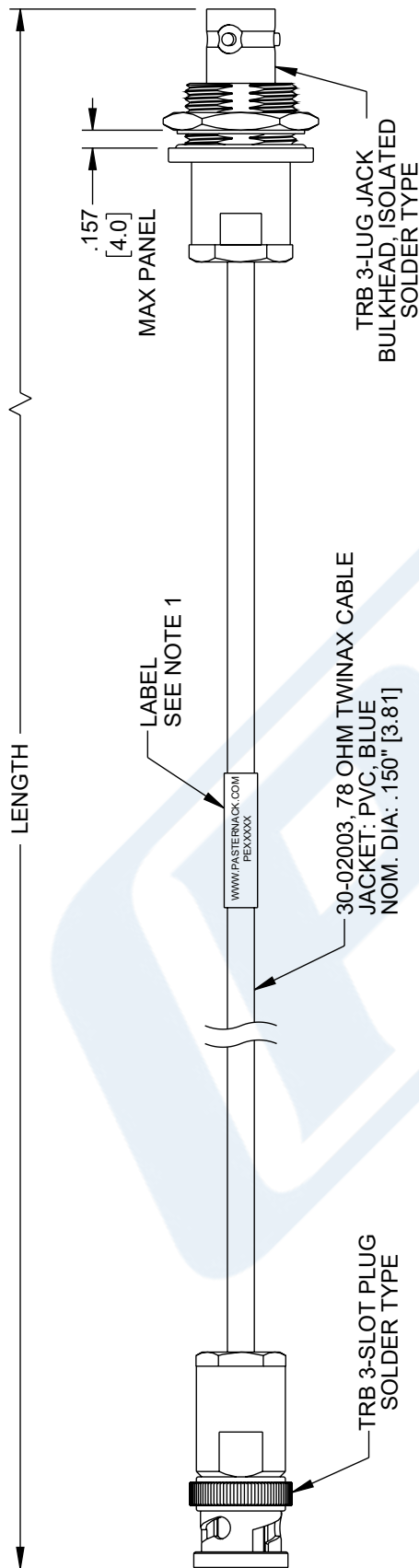
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URL: <https://www.pasternack.com/trb-plug-to-trb-jack-bulkhead-1553-cable-using-pe-30-02003-lf-solder-pe3msa00474-p.aspx>

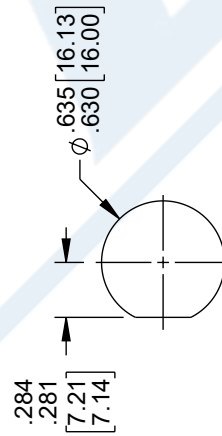
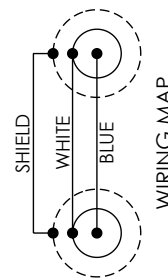
The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such 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.

LEAD FREE SOLDER

ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	04/25/2023	DMAY	EKIM



ITEM NUMBER	LENGTH	
	FEET	METERS
PE3MSA00474-12	1.0	.31
PE3MSA00474-24	2.0	.61
PE3MSA00474-36	3.0	.92
PE3MSA00474-48	4.0	1.22
PE3MSA00474-60	5.0	1.52

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.

REGULATORY COMPLIANCE:

EU RoHS Directive (Most Recent Released Version)

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INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

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

DESCRIPTION

LEAD FREE LAB 0.150" O.D. 1553 TWNX P-INS BHIJ

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	53919	DMAY	PE3MSA00474	A

UNLESS OTHERWISE SPECIFIED
LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN () ARE MILLIMETERS

TOLERANCES:

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

CABLE LENGTH TOLERANCES:

$$\begin{array}{l} \leq 12 \text{ [305]} = +1 \text{ [25]} / -0 \\ > 12 \text{ [305]} \leq 60 \text{ [1524]} = +2 \text{ [51]} / -0 \\ > 60 \text{ [1524]} \leq 120 \text{ [3048]} = +4 \text{ [102]} / -0 \\ > 120 \text{ [3048]} \leq 300 \text{ [7620]} = +6 \text{ [152]} / -0 \\ > 300 \text{ [7620]} = +5\% / -0 \end{array}$$

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