



Lead Free 78 Ohm Bend Relief 3-Slot TRB Solder/
Clamp Plug to Plug for PE-30-02001 Cable

RF Cable Assemblies Technical Data Sheet

PE3MSA00545

Configuration

- Connector 1: TRB Plug
- Connector 2: TRB Plug
- Cable Type: 30-02001

Features

- Max Frequency 400 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 PE3MSA00545 78 ohm TRB plug to 78 ohm TRB plug cable using 78 ohm PE-30-02001 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 plug gender configuration with 78 ohm flexible 30-02001 twinax. The PE3MSA00545 TRB plug to TRB plug cable assembly operates to 400 MHz. The PE3MSA00545 it's a Lead Free cable assembly consisting of a Bend Relief 3-slot solder/clamp TRB Plug to Plug for PE-30-02001; that offer a lower-cost, lab-rated PVC cabling solution for laboratory implementations for MIL-STD-1553 applications. It features a larger diameter cable (0.242" O.D.). These cable assemblies come with a 1.700" steel spring-style bend relief that helps to minimize cable damage when exceeding the cables minimum bend radius. These assemblies are built to withstand severe shocks and vibrations.

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 Bend Relief 3-Slot TRB Solder/Clamp Plug to Plug for PE-30-02001 Twinax \(242 O.D.\) Cable PE3MSA00545](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		400	MHz
Capacitance		19.7 [64.63]		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	400	MHz
Insertion Loss (Typ.)	0.021	0.05	0.075	0.11	0.16	dB/ft
	0.07	0.16	0.25	0.36	0.52	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 0.32 lbs [145.15 g]

Cable

Cable Type 30-02001
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 2.42 in [61.47 mm]

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 Bend Relief 3-Slot TRB Solder/Clamp Plug to Plug for PE-30-02001 Twi-nax \(242 O.D.\) Cable PE3MSA00545](#)



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Connectors

Description	Connector 1	Connector 2
Type	TRB Plug	TRB 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:

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PE3MSA00545

How to Order

Part Number Configuration:

PE3MSA00545

- **xx**

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

Example: PE3MSA00545-12 = 12 inches long cable
PE3MSA00545-100cm = 100 cm long cable

Lead Free 78 Ohm Bend Relief 3-Slot TRB Solder/Clamp Plug to Plug for PE-30-02001 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.

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 Bend Relief 3-Slot TRB Solder/Clamp Plug to Plug for PE-30-02001 Twinax \(242 O.D.\) Cable PE3MSA00545](https://www.pasternack.com/trb-plug-to-trb-plug-1553-cable-using-pe-30-02001-lf-solder-pe3msa00545-p.aspx)

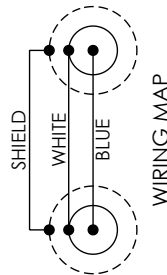
URL: <https://www.pasternack.com/trb-plug-to-trb-plug-1553-cable-using-pe-30-02001-lf-solder-pe3msa00545-p.aspx>

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.

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Technical drawing of a 78 OHM TWINAX CABLE. The drawing shows the cable with its connectors and a label. The label contains the text: WWW.PASTERNAK.COM, PEXXXXX. The cable is labeled as 78 OHM TWINAX CABLE, JACKET: PVC, BLUE, NOM. DIA: .242" [6.15]. The drawing also shows a 2X BEND RELIEF and a 2X TRB 3-SLOT PLUG. A dimension line indicates the LENGTH of the cable.

ITEM NUMBER	LENGTH	
	FEET	METERS
PE3MSA00545-12	1.0	.31
PE3MSA00545-24	2.0	.61
PE3MSA00545-36	3.0	.92
PE3MSA00545-48	4.0	1.22
PE3MSA00545-60	5.0	1.52



- 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.

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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS		 		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	
TOLERANCES: .X = ±.2 [5] FRACTIONS .XX = ±.02 [.5] ± 1/32 .XXX = ±.005 [.13] ANGLES ±°		CABLE LENGTH TOLERANCES: ≤12 [305] = +1 [25] / -0 >12 [305] ≤ 60 [1524] = +2 [51] / -0 >60 [1524] ≤ 120 [3048] = +4 [102] / -0 >120 [3048] ≤ 300 [7620] = +6 [152] / -0 >300 [7620] = +5% / -0		SCALE NONE SHEET 1 OF 1	
Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920		DESCRIPTION LEAD FREE LAB 0.242" O.D. 1553 TWNX PBR-PBR			
SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV	
A	53919	DMAY	PE3MSA00545	A	
ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE.					