



Lead Free 78 Ohm 3-Slot TRB Solder/Clamp
Plug to Plug for PE-30-02003 48" Cable

RF Cable Assemblies Technical Data Sheet

PE3MSA00470-48

Configuration

- Connector 1: TRB Plug
- Connector 2: TRB Plug
- 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 PE3MSA00470-48 78 ohm TRB plug to 78 ohm TRB plug 48 inch 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 plug gender configuration with 78 ohm flexible 30-02003 twinax. The PE3MSA00470-48 TRB plug to TRB plug cable assembly operates to 500 MHz. The PE3MSA00470 it's a Lead Free assembly consisting of a 3-slot solder/clamp TRB plug to 3-slot solder/clamp TRB plug for PE-30-02003, that is a standard lab-rated PVC cable for MIL-STD-1553 applications, with an O.D. 0.150"

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 3-Slot TRB Solder/Clamp Plug to Plug for PE-30-02003 Twinax \(.150 O.D.\) 48" Cable PE3MSA00470-48](#)



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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.)	0.42	0.68	0.88	1.15	1.7	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.

Mechanical Specifications

Cable Assembly

Length*	48 in [121.92 cm]
Weight	0.306 lbs [138.8 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 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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PE3MSA00470-48

How to Order

Part Number Configuration:

PE3MSA00470

- **xx**

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

Example: PE3MSA00470-12 = 12 inches long cable
PE3MSA00470-100cm = 100 cm long cable

Lead Free 78 Ohm 3-Slot TRB Solder/Clamp Plug to Plug for PE-30-02003 48" 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.

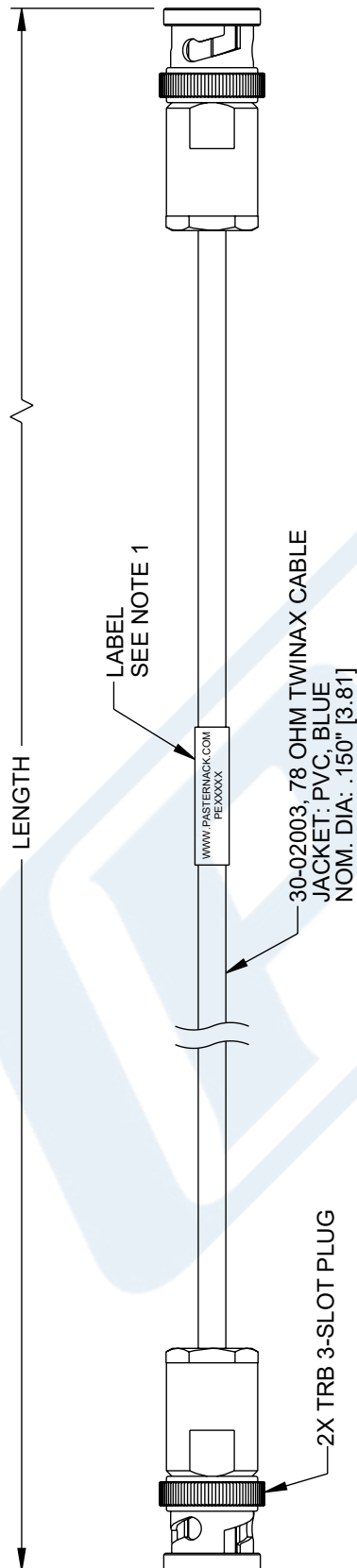
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Lead Free 78 Ohm 3-Slot TRB Solder/Clamp Plug to Plug for PE-30-02003 Twinax \(.150 O.D.\) 48" Cable PE3MSA00470-48](#)

URL: <https://www.pasternack.com/trb-plug-to-trb-plug-1553-cable-48-inch-length-using-pe-30-02003-lf-solder-pe3msa00470-48-p.aspx>

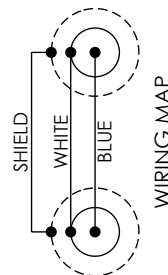
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ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	04/25/2023	DMAY	EKIM



ITEM NUMBER	LENGTH	
	FEET	METERS
PE3MSA00470-12	1.0	.31
PE3MSA00470-24	2.0	.61
PE3MSA00470-36	3.0	.92
PE3MSA00470-48	4.0	1.22
PE3MSA00470-60	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.

REGULATORY COMPLIANCE:
EU RoHS DIRECTIVE (MOST RECENT RELEASED VERSION)

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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS		 	
TOLERANCES: X = ± .2 [5] XX = ± .02 [5] XXX = ± .005 [13]		FRACTIONS ± 1/32 ANGLES ± 1°	
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			
ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE.			