PASTERNACK
an INFINITE brand

78 Ohm 3-Slot TRB Solder/Clamp Plug to 3-Lug TRB Solder/Clamp Jack for PE-30-02001, 48” Cable

RF Cable Assemblies Technical Data Sheet PE3MP2177-48

Configuration

- Connector 1: TRB Plug
- Connector 2: TRB Jack
- Cable Type: 30-02001
- Coax Flex Type: Flexible

Features

- Max Frequency 400 MHz
- PVC Jacket
- MIL-STD-1553
- -20°C to +75°C
- 78 ohms
- Lab rated

Applications

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

Description

Pasternack’s PE3MP2177-48 78 ohm TRB plug to 78 ohm TRB jack 48 inch 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 jack gender configuration with 78 ohm flexible 30-02001 twinax. The PE3MP2177-48 TRB plug to TRB jack cable assembly operates to 400 MHz. The PE3MP2177 cable assembly consists of a 3-slot solder/clamp TRB plug to a 3-Lug TRB Solder/Clamp Jack for PE-30-02001, that is a standard lab-rated PVC cable for MIL-STD-1553 applications. It features a larger diameter cable (0.242” O.D.)

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: 78 Ohm 3-Slot TRB Solder/Clamp Plug to 3-Lug TRB Solder/Clamp Jack for PE-30-02001 Twinax (.242 O.D.) 48” Cable PE3MP2177-48

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

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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.)	0.29	0.4	0.5	0.64	0.84	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	0.33275 lbs [150.93 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]

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Connectors

Description	Connector 1	Connector 2
Type	TRB Plug	TRB Jack
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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How to Order

Part Number Configuration: **PE3MP2177 - xx uu**

- uu — Unit of Measure:
  - cm = Centimeters
  - <blank> = Inches
- xx — Length
- PE3MP2177 — Base Number

Example: PE3MP2177-12 = 12 inches long cable
PE3MP2177-100cm = 100 cm long cable

78 Ohm 3-Slot TRB Solder/Clamp Plug to 3-Lug TRB Solder/Clamp Jack for PE-30-02001, 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: 78 Ohm 3-Slot TRB Solder/Clamp Plug to 3-Lug TRB Solder/Clamp Jack for PE-30-02001 Twinax (.242 O.D.) 48” Cable PE3MP2177-48

URL: https://www.pasternack.com/trb-plug-to-trb-jack-1553-cable-48-inch-length-using-pe-30-02001-pe3mp2177-48-p.aspx

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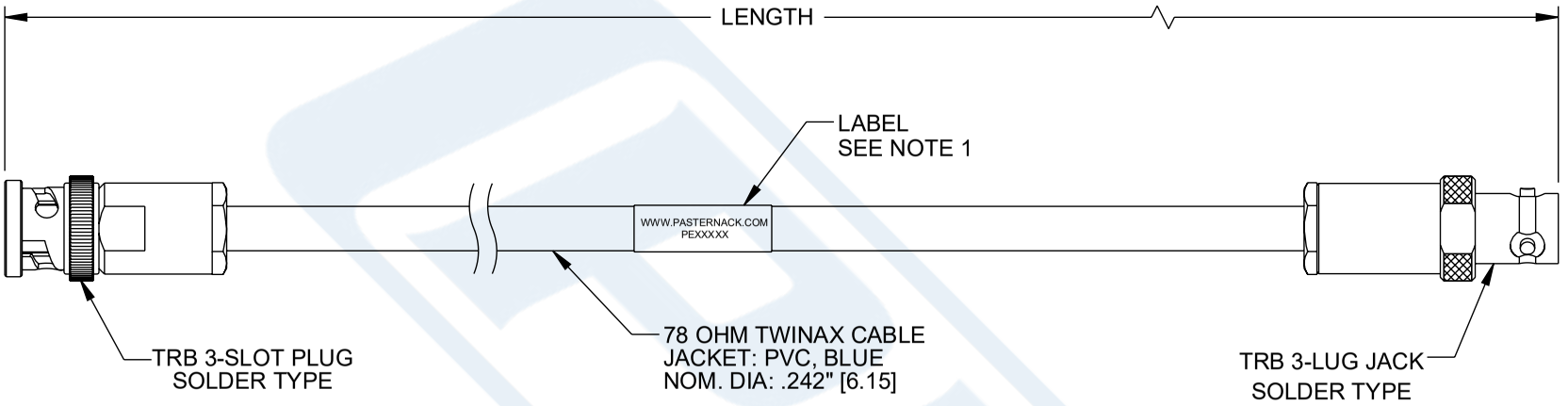
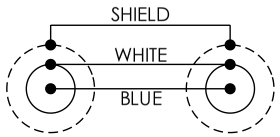
PE3MP2177-48 CAD Drawing

78 Ohm 3-Slot TRB Solder/Clamp Plug to 3-Lug TRB Solder/Clamp Jack for PE-30-02001, 48" Cable

REVISION					
ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	5/24/2023	DMAY	EKIM





WIRING MAP

ITEM NUMBER	LENGTH	
	FEET	METERS
PE3MP2177-12	1.0	.31
PE3MP2177-24	2.0	.61
PE3MP2177-36	3.0	.92
PE3MP2177-48	4.0	1.22
PE3MP2177-60	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.

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

TOLERANCES:

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

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.

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Phone: 1.866.727.8376 | 1.949.261.1920

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE	SHEET
NONE	1 OF 1

DESCRIPTION: CA TRB PLUG/JACK LAB

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	53919	DMAY	PE3MP2177	A

PE3MP2177-48 REV 1.0

T-Rev.D2