



Lead Free 78 Ohm 3-Slot TRB Solder/Clamp Plug  
with Blunt Cut for PE-30-02001 24" Cable

**RF Cable Assemblies Technical Data Sheet**

**PE3MSA00541-24**

**Configuration**

- Connector 1: TRB Plug
- Connector 2: Blunt Cut
- 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 PE3MSA00541-24 78 ohm TRB plug to Blunt cut 24 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. The PE3MSA00541-24 TRB plug to Blunt cut cable assembly operates to 400 MHz. The PE3MSA00541 it's a Lead Free cable assembly consisting of a 3-slot solder/clamp TRB plug with Blunt Cut 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.)

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.

**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         |

Insertion Loss (Typ.)

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.

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 with Blunt Cut for PE-30-02001 Twinax \(.242 O.D.\) 24" Cable PE3MSA00541-24](#)



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**Mechanical Specifications**

**Cable Assembly**

|         |                      |
|---------|----------------------|
| Length* | 24 in [609.6 mm]     |
| Weight  | 0.275 lbs [124.74 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] |
|------------------------------|--------------------|

**Connectors**

| Description                           | Connector 1                  | Connector 2 |
|---------------------------------------|------------------------------|-------------|
| Type                                  | TRB Plug                     | Blunt Cut   |
| Impedance                             | 78 Ohms                      |             |
| Contact Material and Plating          | Bronze, Gold 30 micro inches |             |
| Contact Plating Specification         | ASTM-B-488                   |             |
| Dielectric Type                       | Teflon                       |             |
| Outer Conductor Material and Plating  | Phosphor Bronze, Gold        |             |
| Outer Conductor Plating Specification | 30 micro inches              |             |
| Body Material and Plating             | Brass, Nickel                |             |
| Body Plating Specification            | 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:

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 with Blunt Cut for PE-30-02001 Twinax \(.242 O.D.\) 24" Cable PE3MSA00541-24](#)



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### RF Cable Assemblies Technical Data Sheet

**PE3MSA00541-24**

#### How to Order

Part Number Configuration:

**PE3MSA00541**

- **xx**

**uu**

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

Example: PE3MSA00541-12 = 12 inches long cable  
PE3MSA00541-100cm = 100 cm long cable

Lead Free 78 Ohm 3-Slot TRB Solder/Clamp Plug with Blunt Cut for PE-30-02001 24" 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 with Blunt Cut for PE-30-02001 Twinax \(.242 O.D.\) 24" Cable PE3MSA00541-24](#)

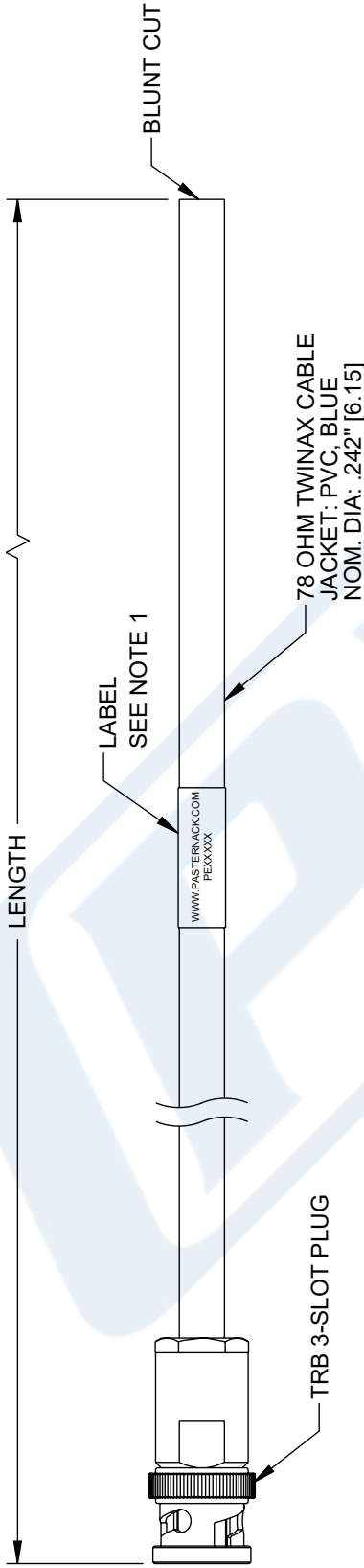
URL: <https://www.pasternack.com/trb-plug-to-blunt-cut-1553-cable-24-inch-length-using-pe-30-02001-lf-solder-pe3msa00541-24-p.aspx>

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.

PE3MSA00541-24 CAD Drawing

Lead Free 78 Ohm 3-Slot TRB Solder/Clamp Plug with  
Blunt Cut for PE-30-02001 24" Cable

LEAD FREE SOLDER

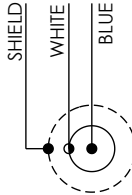


TRB 3-SLOT PLUG

LABEL  
SEE NOTE 1

BLUNT CUT

78 OHM TWINAX CABLE  
JACKET: PVC, BLUE  
NOM. DIA: .242" [6.15]



WIRING MAP

| ITEM NUMBER    | LENGTH |        |
|----------------|--------|--------|
|                | FEET   | METERS |
| PE3MSA00541-12 | 1.0    | .31    |
| PE3MSA00541-24 | 2.0    | .61    |
| PE3MSA00541-36 | 3.0    | .92    |
| PE3MSA00541-48 | 4.0    | 1.22   |
| PE3MSA00541-60 | 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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| ZONE | REV | DESCRIPTION     | DATE       | CHANGED BY | APPROVED |
|------|-----|-----------------|------------|------------|----------|
|      | A   | INITIAL RELEASE | 04/28/2016 | DMAY       | EKIM     |

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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 [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.

INTERPRET ALL DIMENSIONS AND  
TOLERANCES PER ASME Y14.5

SCALE NONE SHEET 1 OF 1

DESCRIPTION  
LEAD FREE LAB 0.242" O.D. 1553 TWNX P-BLUNT

|      |           |          |             |
|------|-----------|----------|-------------|
| SIZE | CAGE CODE | DRAWN BY | ITEM NO.    |
| A    | 53919     | DMAY     | PE3MSA00541 |

REV A