



Lead Free 2-Slot TRB Plug to Plug 1553 Twinax, 48" Cable Using 78 Ohm PE-30-02001

RF Cable Assemblies Technical Data Sheet

PE3MSA00568-48

Configuration

- Connector 1: TRB Plug
- Connector 2: TRB Plug
- 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

Applications

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

Description

Pasternack's PE3MSA00568-48 78 ohm TRB plug to 78 ohm TRB plug 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 plug gender configuration with 78 ohm flexible 30-02001 twinax. The PE3MSA00568-48 TRB plug to TRB plug cable assembly operates to 400 MHz.

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 |

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:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Lead Free 2-Slot TRB Plug to Plug 1553 Twinax, 48" Cable Using 78 Ohm PE-30-02001 PE3MSA00568-48](#)



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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 | 0.216 lbs [97.98 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 | 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:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Lead Free 2-Slot TRB Plug to Plug 1553 Twinax, 48" Cable Using 78 Ohm PE-30-02001 PE3MSA00568-48](#)



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PE3MSA00568-48

How to Order

Part Number Configuration:

PE3MSA00568

- **xx**

uu

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3MSA00568-12 = 12 inches long cable
PE3MSA00568-100cm = 100 cm long cable

Lead Free 2-Slot TRB Plug to Plug 1553 Twinax, 48" Cable Using 78 Ohm PE-30-02001 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.

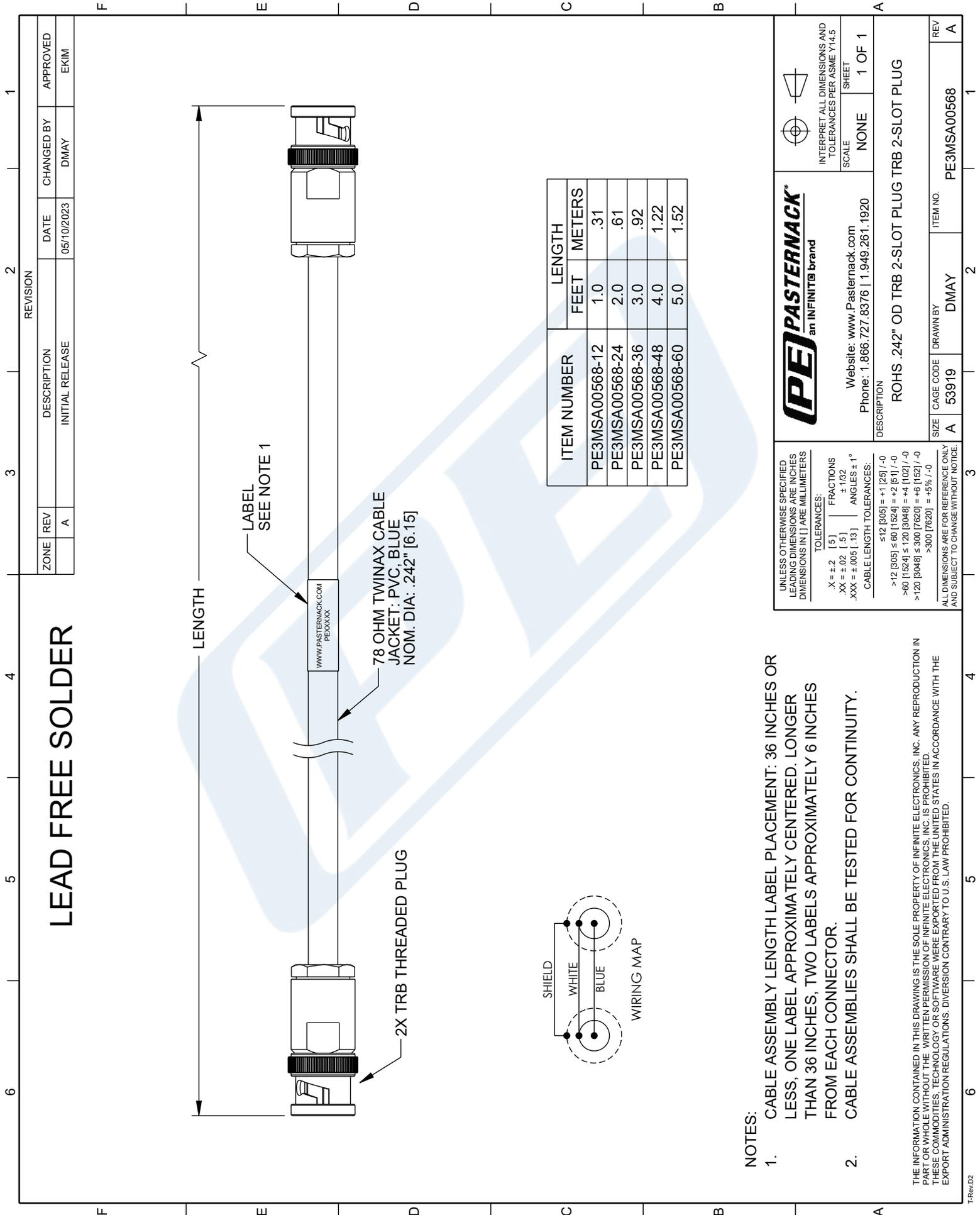
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Lead Free 2-Slot TRB Plug to Plug 1553 Twinax, 48" Cable Using 78 Ohm PE-30-02001 PE3MSA00568-48](https://www.pasternack.com/lead-free-trb-plug-to-trb-plug-1553-cable-48-inch-length-using-pe-30-02001-pe3msa00568-48)

URL: <https://www.pasternack.com/lead-free-trb-plug-to-trb-plug-1553-cable-48-inch-length-using-pe-30-02001-pe3msa00568-48-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.

PE3MSA00568-48 CAD Drawing

Lead Free 2-Slot TRB Plug to Plug 1553 Twinax, 48" Cable Using 78 Ohm PE-30-02001



LEAD FREE SOLDER

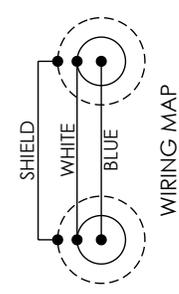
LENGTH

WWW.PASTERNAK.COM
PEXXXX

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

2X TRB THREADED PLUG

LABEL
SEE NOTE 1



| ITEM NUMBER | LENGTH | |
|----------------|--------|--------|
| | FEET | METERS |
| PE3MSA00568-12 | 1.0 | .31 |
| PE3MSA00568-24 | 2.0 | .61 |
| PE3MSA00568-36 | 3.0 | .92 |
| PE3MSA00568-48 | 4.0 | 1.22 |
| PE3MSA00568-60 | 5.0 | 1.52 |

- NOTES:
- 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.
 - CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
- THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

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

TOLERANCES:
 .X = ±.2 [.5] FRACTIONS ±.1/32
 .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.

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

DESCRIPTION
ROHS .242" OD TRB 2-SLOT PLUG TRB 2-SLOT PLUG

SCALE NONE SHEET 1 OF 1

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

| | | | | | |
|------|-----|-----------------|------------|------------|----------|
| ZONE | REV | DESCRIPTION | DATE | CHANGED BY | APPROVED |
| | A | INITIAL RELEASE | 05/10/2023 | DMAY | EKIM |

| | | | |
|------|-----------|----------|-------------|
| SIZE | CAGE CODE | DRAWN BY | ITEM NO. |
| A | 53919 | DMAY | PE3MSA00568 |