



78 Ohm Bend Relief 3-Slot TRB Solder/Clamp Plug to Bend  
Relief 2-Slot TRB Solder/Clamp Plug for PE-30-02001 Cable

## RF Cable Assemblies Technical Data Sheet

**PE3MP2381**

### 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
- Lab rated

### Applications

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

### Description

Pasternack's PE3MP2381 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 PE3MP2381 TRB plug to TRB plug cable assembly operates to 400 MHz. The PE3MP2381 cable assembly consists of a 78 ohm Bend Relief 3-Slot TRB Solder/Clamp Plug to a Bend Relief 2-Slot TRB Solder/Clamp Plug 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.) 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 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: [78 Ohm Bend Relief 3-Slot TRB Solder/Clamp Plug to Bend Relief 2-Slot TRB Solder/Clamp Plug for PE-30-02001 Twinax \(.242 O.D.\) Cable PE3MP2381](#)



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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 0.25 lbs [113.4 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 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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## 78 Ohm Bend Relief 3-Slot TRB Solder/Clamp Plug to Bend Relief 2-Slot TRB Solder/Clamp Plug for PE-30-02001 Cable

### RF Cable Assemblies Technical Data Sheet

**PE3MP2381**

#### How to Order

Part Number Configuration:

**PE3MP2381**

- **xx**

**uu**

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

Example: PE3MP2381-12 = 12 inches long cable  
PE3MP2381-100cm = 100 cm long cable

78 Ohm Bend Relief 3-Slot TRB Solder/Clamp Plug to Bend Relief 2-Slot TRB Solder/Clamp 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: [78 Ohm Bend Relief 3-Slot TRB Solder/Clamp Plug to Bend Relief 2-Slot TRB Solder/Clamp Plug for PE-30-02001 Twinax \(.242 O.D.\) Cable PE3MP2381](#)

URL: <https://www.pasternack.com/trb-plug-to-trb-plug-1553-cable-using-pe-30-02001-pe3mp2381-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.

PE3MP2381 CAD Drawing

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

