



TRB 2-Slot Plug to TRB 3-Slot Plug 1553 Cable  
24 Inch Length Using 124 Ohm TWC-124-2 Coax

## RF Cable Assemblies Technical Data Sheet

**PE3MSA00681-24**

### Configuration

- Connector 1: TRB 2-Slot Plug
- Connector 2: TRB 3-Slot Plug
- Cable Type: TWC-124-2
- Coax Flex Type: Flexible

### Features

- Max Frequency 500 MHz
- PVC Jacket
- 124 ohms
- Twinaxial
- MIL-STD-1553B
- -40°C to +80°C
- Lead Free Solder
- Standard and Custom Lengths Available

### Applications

- General Purpose
- Laboratory Use
- MIL-STD-1553B Applications
- Data Transmission

### Description

Pasternack's PE3MSA00681-24 78 ohm TRB 2-Slot plug to 78 ohm TRB 3-Slot plug 24 inch cable using 124 ohm TWC-124-2 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 2-Slot to TRB 3-Slot cable assembly has a plug to plug gender configuration with 124 ohm flexible TWC-124-2 twinax. The PE3MSA00681-24 TRB 2-Slot plug to TRB 3-Slot plug cable assembly operates to 500 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [TRB 2-Slot Plug to TRB 3-Slot Plug 1553 Cable 24 Inch Length Using 124 Ohm TWC-124-2 Coax PE3MSA00681-24](#)



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### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		500	MHz
Capacitance		12.3 [40.35]		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	500	MHz
Insertion Loss (Typ.)	0.234	0.272	0.302	0.344	0.428	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*	24 in [609.6 mm]
Weight	0.275 lbs [124.74 g]

#### Cable

Cable Type	TWC-124-2
Impedance	124 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	1.25 in [31.75 mm]
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### Connectors

Description	Connector 1	Connector 2
Type	TRB 2-Slot Plug Bayonet	TRB 3-Slot Plug Bayonet
Specification	MIL-STD-1553	MIL-STD-1553
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 -40 to +80 deg C

**Compliance Certifications** (see [product page](#) for current document)

### Plotted and Other Data

Notes:

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## RF Cable Assemblies Technical Data Sheet

**PE3MSA00681-24**

### How to Order

Part Number Configuration:

**PE3MSA00681**

- **xx**

**uu**

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3MSA00681-12 = 12 inches long cable  
PE3MSA00681-100cm = 100 cm long cable

TRB 2-Slot Plug to TRB 3-Slot Plug 1553 Cable 24 Inch Length Using 124 Ohm TWC-124-2 Coax 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: [TRB 2-Slot Plug to TRB 3-Slot Plug 1553 Cable 24 Inch Length Using 124 Ohm TWC-124-2 Coax PE3MSA00681-24](https://www.pasternack.com/trb-2-slot-plug-to-trb-3-slot-plug-1553-cable-24-inch-length-using-twc-124-2-pe3msa00681-24)

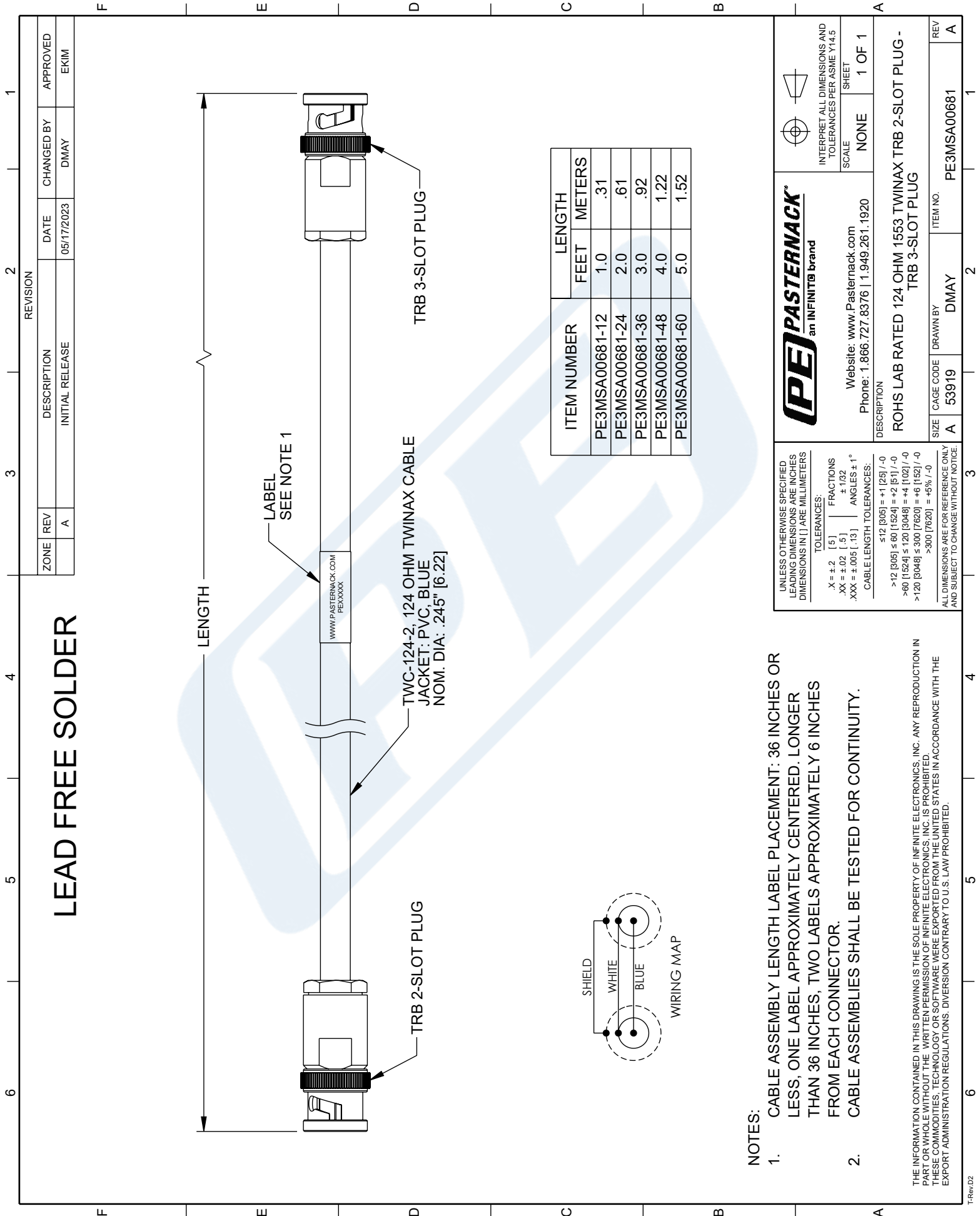
URL: <https://www.pasternack.com/trb-2-slot-plug-to-trb-3-slot-plug-1553-cable-24-inch-length-using-twc-124-2-pe3msa00681-24-p.aspx>

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.

# PE3MSA00681-24 CAD Drawing

TRB 2-Slot Plug to TRB 3-Slot Plug 1553 Cable 24 Inch

Length Using 124 Ohm TWC-124-2 Coax



ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	05/17/2023	DMAY	EKIM

REVISION	1
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ITEM NUMBER	LENGTH
	FEET METERS
PE3MSA00681-12	1.0 .31
PE3MSA00681-24	2.0 .61
PE3MSA00681-36	3.0 .92
PE3MSA00681-48	4.0 1.22
PE3MSA00681-60	5.0 1.52

		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5
		SCALE NONE
		SHEET 1 OF 1

		Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a> Phone: 1.866.727.8376   1.949.261.1920
DESCRIPTION		
ROHS LAB RATED 124 OHM 1553 TWINAX TRB 2-SLOT PLUG - TRB 3-SLOT PLUG		

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	DMAY	PE3MSA00681

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS	
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 [5] / -0
>60 [1524] < 120 [3048]	±.4 [102] / -0
>120 [3048] < 300 [7620]	±.6 [152] / -0
>300 [7620]	±.8 [203] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE.	
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LEAD FREE SOLDER
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WIRING MAP
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NOTES:
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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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PE3MSA00681-24 REV 1.0

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