

## 2.2-5 Male to 2.2-5 Male Low PIM Cable 12 Inch Length Using TFT-5G-402 Coax Using Times Microwave Components



### PE3C7980-12

#### Configuration

- Connector 1: 2.2-5 Male
- Connector 2: 2.2-5 Male
- Cable Type: TFT-5G-402
- Coax Flex Type: Flexible

#### Features

- Max Frequency 3 GHz
- Low PIM: -160 dBc Max
- Shielding Effectivity > 80 dB
- 76% Phase Velocity
- Double Shielded
- FEP Jacket
- 100 Mating Cycles



#### Applications

- General Purpose
- Laboratory Use
- Low PIM Applications
- Indoor and Outdoor Use
- Plenum Rated Applications

#### Description

Pasternack's PE3C7980-12 2.2-5 male to 2.2-5 male 12 inch cable using TFT-5G-402 coax 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 2.2-5 to 2.2-5 cable assembly has a male to male gender configuration with 50 ohm flexible TFT-5G-402 coax. The PE3C7980-12 2.2-5 male to 2.2-5 male cable assembly operates to 3 GHz. Our low PIM design also offers excellent passive intermodulation performance with PIM levels better than -160 dBc. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 80 dB.

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		3	GHz
VSWR			1.4:1	
Velocity of Propagation		76		%
RF Shielding	80			dB
Passive Intermodulation			-160	dBc

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**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Capacitance		26.7 [87.6]		pF/ft [pF/m]

**Specifications by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.17	0.22	0.31	0.52	0.78	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\*SQRT(FGHz) dB per connector.

**Mechanical Specifications**

**Cable Assembly**

Length	12 in [304.8 mm]
Width/Diameter	0.65 in [16.51 mm]

**Cable**

Cable Type	TFT-5G-402
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
Dielectric Type	PTFE
Number of Shields	2
Jacket Material	FEP, Blue
Jacket Diameter	0.16 in [4.06 mm]
One Time Minimum Bend Radius	0.75 in [19.05 mm]

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**Connectors**

Description	Connector 1	Connector 2
Type	2.2-5 Male	2.2-5 Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	100	100
Contact Material and Plating	Beryllium Copper, Silver	Beryllium Copper, Silver
Contact Plating Specification	200 μin	200 μin
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Silver	Brass, Silver
Body Plating Specification	100 μin	100 μin
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	100 μin	100 μin
Torque	26 in-lbs 2.94 Nm	26 in-lbs 2.94 Nm

**Environmental Specifications**

Operating Range Temperature -40 to +125 deg C

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

**Plotted and Other Data**

Notes:

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### PE3C7980-12

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**PE3C7980**

- **xx**

**uu**

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

Example: PE3C7980-12 = 12 inches long cable  
PE3C7980-100cm = 100 cm long cable

2.2-5 Male to 2.2-5 Male Low PIM Cable 12 Inch Length Using TFT-5G-402 Coax Using Times Microwave Components 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.

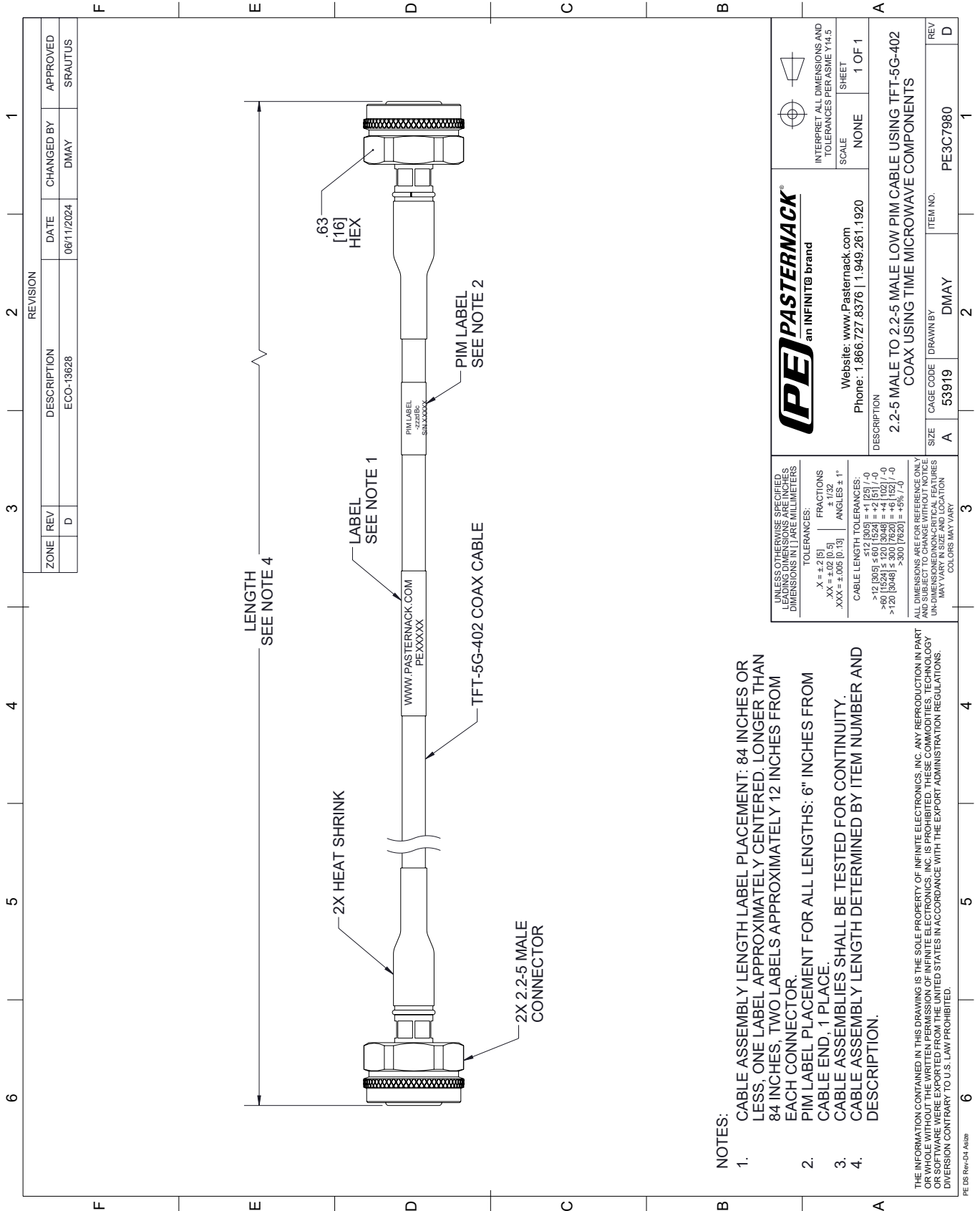
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [2.2-5 Male to 2.2-5 Male Low PIM Cable 12 Inch Length Using TFT-5G-402 Coax Using Times Microwave Components PE3C7980-12](https://www.pasternack.com/2.2-5-male-to-2.2-5-male-low-pim-cable-12-inch-length-using-tft-5g-402-pe3c7980-12-p.aspx)

URL: <https://www.pasternack.com/2.2-5-male-to-2.2-5-male-low-pim-cable-12-inch-length-using-tft-5g-402-pe3c7980-12-p.aspx>

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# PE3C7980-12 CAD Drawing

2.2-5 Male to 2.2-5 Male Low PIM Cable 12 Inch Length Using TFT-5G-402 Coax Using Times Microwave Components



REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV			
	D	06/11/2024	DMAY	SRAUTUS
DESCRIPTION		ECO-13628		

		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	
		SCALE	NONE
Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a> Phone: 1.866.727.8376   1.949.261.1920		SHEET	1 OF 1
DESCRIPTION 2.2-5 MALE TO 2.2-5 MALE LOW PIM CABLE USING TFT-5G-402 COAX USING TIME MICROWAVE COMPONENTS			
SIZE	A	CAGE CODE	DMAY
DRAWN BY		ITEM NO.	PE3C7980

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES. DIMENSIONS IN PARENTHESES ARE IN MILLIMETERS.

TOLERANCES:  
 X = ±.2 (5) FRACTIONS  
 .XX = ±.02 (0.5) ±.1/32  
 .XXX = ±.005 (0.13) ANGLES ± 1°

CABLE LENGTH TOLERANCES:  
 >12 [305] ±.60 [1524] = ±.2 (5) / -0  
 >60 [1524] ≤ 120 [3048] = ±.4 (102) / -0  
 >120 [3048] ≤ 300 [7620] = ±.6 (152) / -0  
 >300 [7620] = ±.9% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. DIMENSIONS OF INDIVIDUAL COMPONENTS MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

**NOTES:**

1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 84 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED, LONGER THAN 84 INCHES, TWO LABELS APPROXIMATELY 12 INCHES FROM EACH CONNECTOR.
2. PIM LABEL PLACEMENT FOR ALL LENGTHS: 6" INCHES FROM CABLE END, 1 PLACE.
3. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
4. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM NUMBER AND DESCRIPTION.

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PE DS Rev-D4 Add2b