

NEX10 Male to NEX10 Male Low PIM Cable Using TFT-5G-402 Coax

PE3W17851



Configuration

- Connector 1: NEX10 Male
- Connector 2: NEX10 Male
- Cable Type: TFT-5G-402
- Coax Flex Type: Flexible

Features

- Max Frequency 5.8 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

Description

Pasternack's PE3W17851 NEX10 male to NEX10 male 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 NEX10 to NEX10 cable assembly has a male to male gender configuration with 50 ohm flexible TFT-5G-402 coax. The PE3W17851 NEX10 male to NEX10 male cable assembly operates to 5.8 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		5.8	GHz
VSWR			1.4:1	
Velocity of Propagation		76		%
RF Shielding	80			dB
Passive Intermodulation			-160	dBc
Capacitance		26.7 [87.6]		pF/ft [pF/m]

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	450	500	1000	2500	5000	MHz	
PE3W17851	Custom Lengths Available	Insertion Loss (Typ.)	0.08	0.08	0.111	0.189	0.272	dB/ft	
			0.26	0.27	0.37	0.62	0.9	dB/m	
PE3W17851-12	12 inch	Insertion Loss (Typ.)	0.28	0.29	0.32	0.39	0.48	dB	0.088
PE3W17851-24	24 inch	Insertion Loss (Typ.)	0.36	0.37	0.43	0.58	0.75	dB	0.117
PE3W17851-36	36 inch	Insertion Loss (Typ.)	0.44	0.45	0.54	0.77	1.02	dB	0.145
PE3W17851-60	60 inch	Insertion Loss (Typ.)	0.6	0.61	0.76	1.15	1.56	dB	0.201
PE3W17851-200CM	200 CM	Insertion Loss (Typ.)	0.72	0.74	0.93	1.44	1.99	dB	0.245

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1:	0.1 dB
Loss due to Connector 2:	0.1 dB
Base Weight:	0.088 pounds
Additional Weight per Inch:	0.00234 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.088 lbs [39.92 g]

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
Shield Layer 1	Tin
Outer Conductor 1 Material and Plating	Copper, Tin
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	NEX10 Male	NEX10 Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	100	100
Contact Material and Plating	Brass, Silver	Brass, Silver
Contact Plating Specification	100 µin	100 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	9 in-lbs 1.02 Nm	9 in-lbs 1.02 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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PE3W17851

Typical Performance Data

How to Order

Part Number Configuration:

PE3W17851

- XX

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- Unit of Measure:
cm = Centimeters
<blank> = Inches

- Length

- Base Number

Example: PE3W17851-12 = 12 inches long cable
PE3W17851-100cm = 100 cm long cable

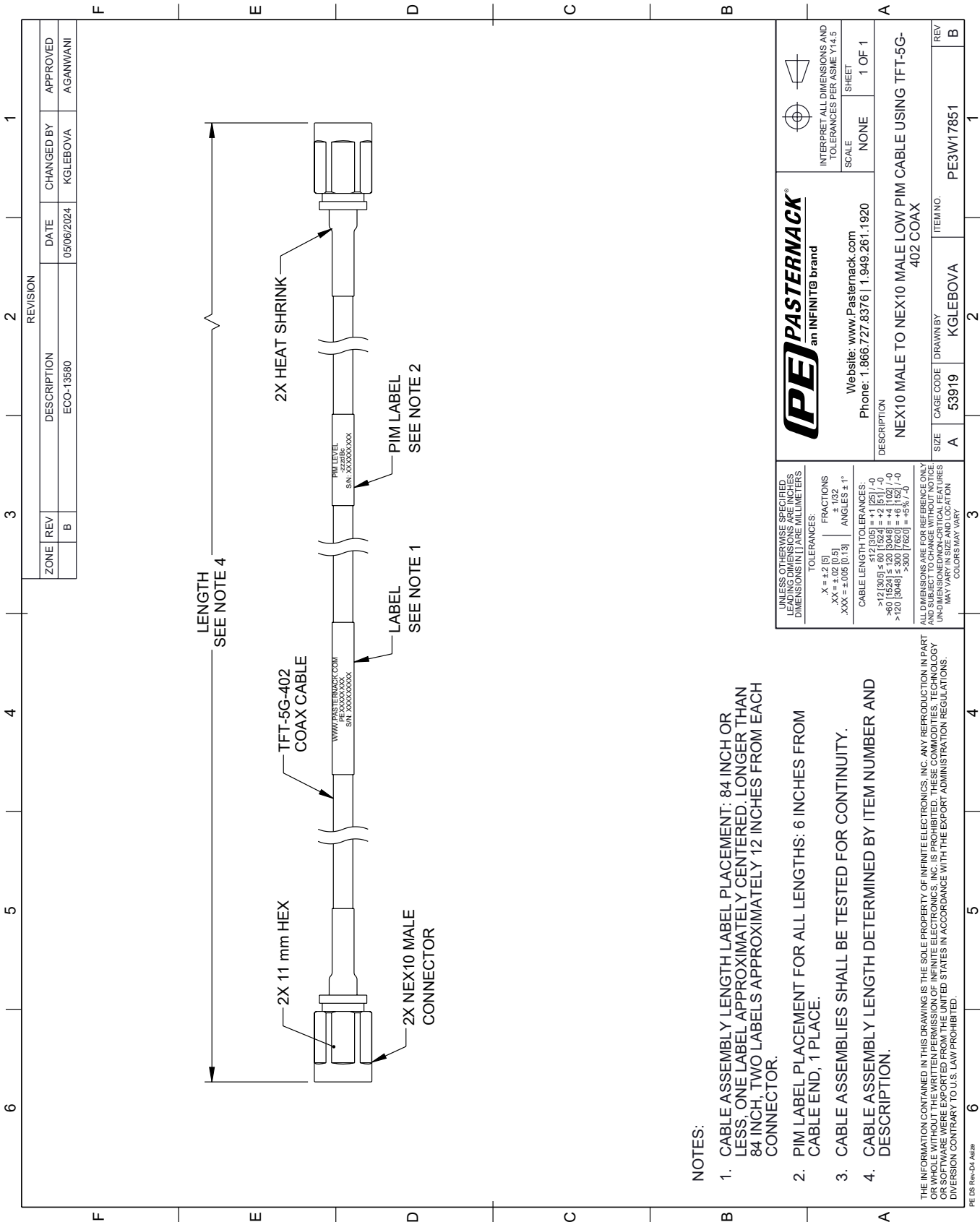
NEX10 Male to NEX10 Male Low PIM Cable Using TFT-5G-402 Coax from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [NEX10 Male to NEX10 Male Low PIM Cable Using TFT-5G-402 Coax PE3W17851](#)

URL: <https://www.pasternack.com/nex10-male-to-nex10-male-low-pim-cable-using-tft-5g-402-pe3w17851-p.aspx>

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PE3W17851 CAD Drawing
NEX10 Male to NEX10 Male Low PIM Cable Using TFT-5G-402 Coax



- 1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 84 INCH OR LESS, ONE LABEL APPROXIMATELY CENTERED, LONGER THAN 84 INCH, 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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