

NEX10 Male to QMA Male Right Angle Low PIM Cable Using TFT-5G-402 Coax with Times Microwave Components



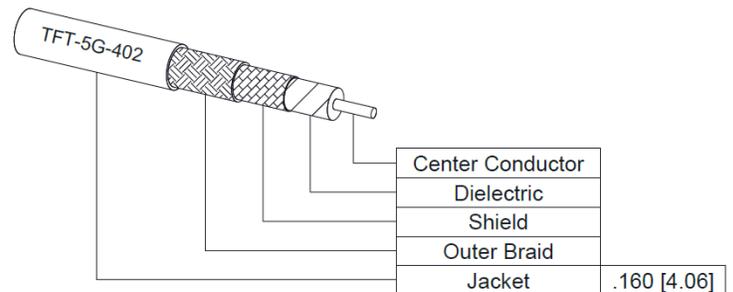
PE3W14945

Configuration

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

Features

- Max Frequency 3 GHz
- Low PIM: -150 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 PE3W14945 NEX10 male to QMA male right angle 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 QMA cable assembly has a male to male gender configuration with 50 ohm flexible TFT-5G-402 coax. The PE3W14945 NEX10 male to QMA male cable assembly operates to 3 GHz. Our low PIM design also offers excellent passive intermodulation performance with PIM levels better than -150 dBc. The right angle QMA interface on the TFT-5G-402 cable allows for easier connections in tight spaces. 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			-150	dBc
IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz				
Capacitance		26.7 [87.6]		pF/ft [pF/m]

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	Units	Weight (lbs)
			Frequency	500	1000	3000	
PE3W14945	Custom Lengths Available	Insertion Loss (Typ.)	0.081	0.111	0.205	dB/ft	
			0.27	0.37	0.68	dB/m	
PE3W14945-12	12 In	Insertion Loss (Typ.)	0.57	0.6	0.69	dB	0.088
PE3W14945-24	24 In	Insertion Loss (Typ.)	0.65	0.71	0.89	dB	0.117
PE3W14945-36	36 In	Insertion Loss (Typ.)	0.73	0.82	1.1	dB	0.145
PE3W14945-60	60 In	Insertion Loss (Typ.)	0.89	1.04	1.51	dB	0.201
PE3W14945-200CM	200 CM	Insertion Loss (Typ.)	1.02	1.21	1.83	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:	0.24 dB
Loss due to Connector 2:	0.24 dB
Base Weight:	0.088 pounds
Additional Weight per Inch:	0.00234 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	.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	QMA Male Right Angle
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
Mating Cycles	100	100
Contact Material and Plating	Brass, Silver	Beryllium Copper, Silver
Contact Plating Specification	100 μin	200 μin
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Silver	Brass, Tri-Metal
Body Plating Specification	100 μin	80 μin
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	100 μin	80 μin
Torque	9 in-lbs 1.02 Nm	

Environmental Specifications

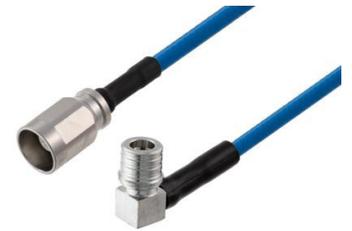
Operating Range Temperature -40 to +85 deg C

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

Plotted and Other Data

Notes:

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PE3W14945

Typical Performance Data

How to Order

Part Number Configuration: **PE3W14945 - xx uu**

PE3W14945: Base Number
 - xx: Length
 uu: Unit of Measure:
 cm = Centimeters
 <blank> = Inches

Example: PE3W14945-12 = 12 inches long cable
 PE3W14945-100cm = 100 cm long cable

NEX10 Male to QMA Male Right Angle Low PIM Cable Using TFT-5G-402 Coax with 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.

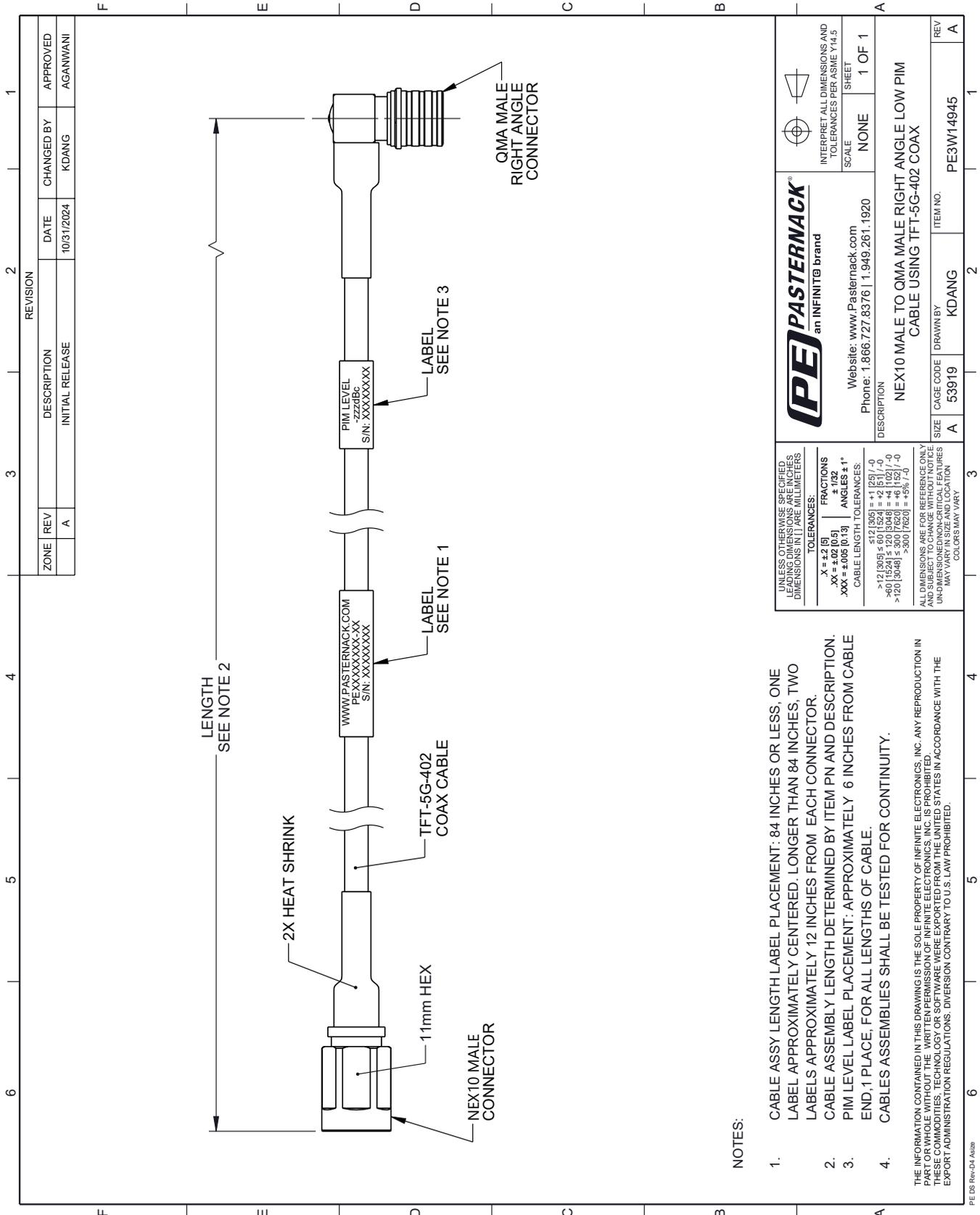
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [NEX10 Male to QMA Male Right Angle Low PIM Cable Using TFT-5G-402 Coax with Times Microwave Components PE3W14945](https://www.pasternack.com/nex10-male-to-qma-male-low-pim-cable-using-tft-5g-402-pe3w14945-p.aspx)

URL: <https://www.pasternack.com/nex10-male-to-qma-male-low-pim-cable-using-tft-5g-402-pe3w14945-p.aspx>

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PE3W14945 CAD Drawing

NEX10 Male to QMA Male Right Angle Low PIM Cable Using TFT-5G-402 Coax with Times Microwave Components



ZONE		REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
		A	INITIAL RELEASE	10/31/2024	KDANG	AGANWANI

REVISION		DATE	CHANGED BY	APPROVED
		10/31/2024	KDANG	AGANWANI

NOTES:

- CABLE ASSY LENGTH LABEL PLACEMENT: 84 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 84 INCHES, TWO LABELS APPROXIMATELY 12 INCHES FROM EACH CONNECTOR.
- CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.
- PIM LEVEL LABEL PLACEMENT: APPROXIMATELY 6 INCHES FROM CABLE END, 1 PLACE, FOR ALL LENGTHS OF CABLE.
- CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

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UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS.	TOLERANCES: .X = ±.2 [5] .XX = ±.02 [0.5] .XXX = ±.005 [0.13]	FRACTIONS ± 1/32 ANGLES ± 1°
	CABLE LENGTH TOLERANCES: ≤12 [305] ±.12 [3.05] = +1 [25] / -0 >12 [305] ≤ 60 [1524] = +.2 [5] / -0 >60 [1524] ≤ 120 [3048] = +.4 [102] / -0 >120 [3048] ≤ 300 [7620] = +.8 [20] / -0	
ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS. COLORS MAY VARY.		

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INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE
 SHEET: 1 OF 1

DESCRIPTION: NEX10 MALE TO QMA MALE RIGHT ANGLE LOW PIM CABLE USING TFT-5G-402 COAX

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	KDANG	PE3W14945