

NEX10 Male to NEX10 Male Low PIM Cable
150 CM Length Using TFT-5G-402 Coax Using
Times Microwave Components



PE3C8003-150CM

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
- Indoor and Outdoor Use
- Plenum Rated Applications

Description

Pasternack's PE3C8003-150CM NEX10 male to NEX10 male 150 cm 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 PE3C8003-150CM 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 |

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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.) | 0.4 | 0.54 | 0.75 | 1.21 | 1.91 | 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 $0.1 \cdot \sqrt{FGHz}$ dB per connector.

Mechanical Specifications

Cable Assembly

| | |
|----------------|----------------------|
| Length | 59.06 in [150.01 cm] |
| Width/Diameter | 0.472 in [11.99 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 | 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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PE3C8003-150CM

Typical Performance Data

How to Order

Part Number Configuration:

PE3C8003

- **xx**

uu

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3C8003-12 = 12 inches long cable
PE3C8003-100cm = 100 cm long cable

NEX10 Male to NEX10 Male Low PIM Cable 150 CM 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.

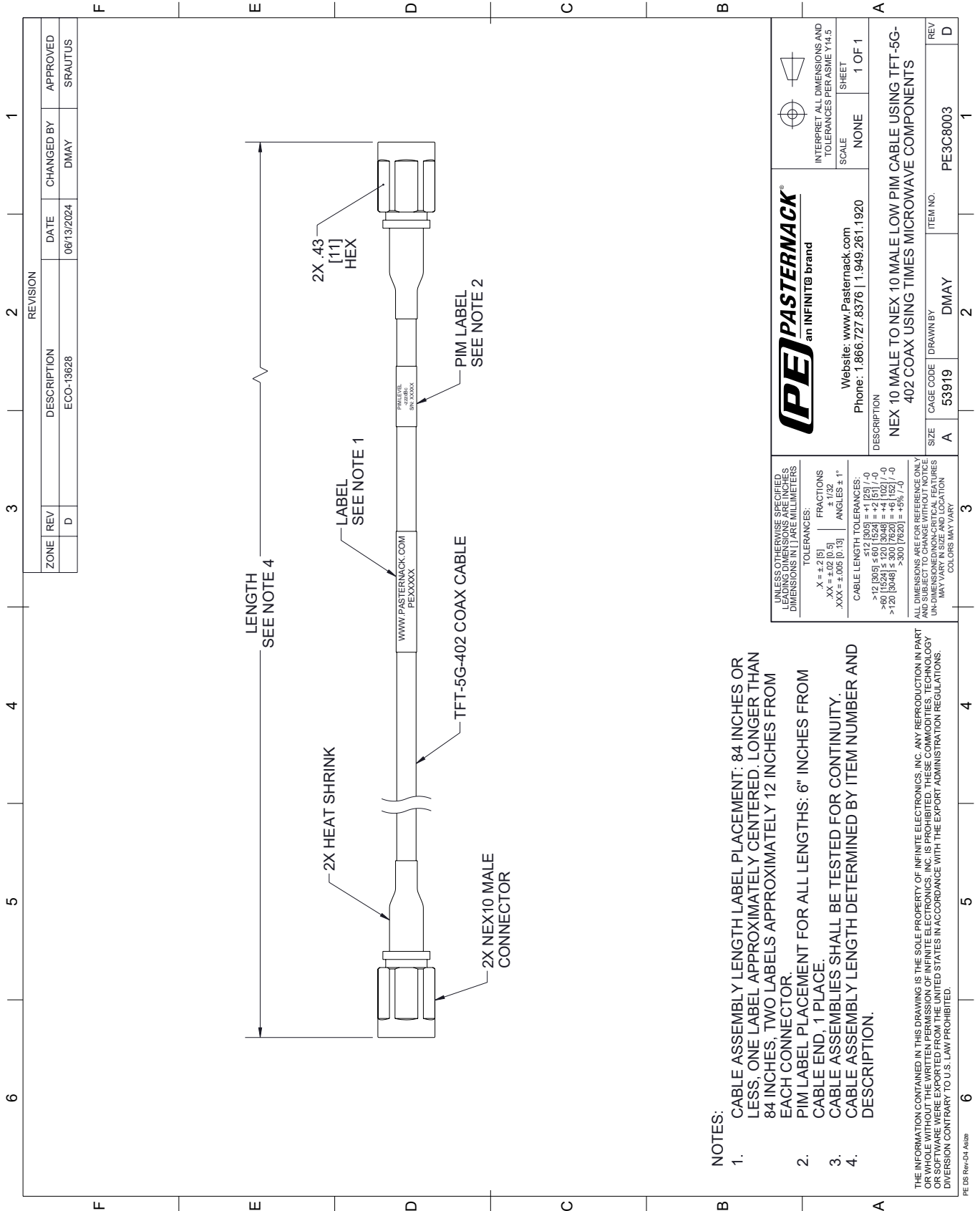
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [NEX10 Male to NEX10 Male Low PIM Cable 150 CM Length Using TFT-5G-402 Coax Using Times Microwave Components PE3C8003-150CM](https://www.pasternack.com/nex10-male-to-nex10-male-low-pim-cable-150-cm-length-using-tft-5g-402-pe3c8003-150cm-p.aspx)

URL: <https://www.pasternack.com/nex10-male-to-nex10-male-low-pim-cable-150-cm-length-using-tft-5g-402-pe3c8003-150cm-p.aspx>

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PE3C8003-150CM CAD Drawing



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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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|---|-----------|---|
|  <p>an INFINITE brand</p> | |  <p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p> |
| Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920 | | SCALE: NONE SHEET: 1 OF 1 |
| DESCRIPTION: NEX 10 MALE TO NEX 10 MALE LOW PIM CABLE USING TFT-5G-402 COAX USING TIMES MICROWAVE COMPONENTS | | |
| SIZE | CAGE CODE | ITEM NO. |
| A | 53919 | PE3C8003 |
| DRAWN BY: DMAY | | REV: D |

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

TOLERANCES:
 X = ±.2 (5)
 .XX = ±.02 (0.5)
 .XXX = ±.005 (0.13)

FRACTIONS:
 ± 1/32

ANGLES: ± 1°

CABLE LENGTH TOLERANCES:
 >12 [305] ≤ 60 [1524] = ±.031 (-0)
 >60 [1524] ≤ 120 [3048] = ±.062 (-0)
 >120 [3048] ≤ 300 [7620] = ±.125 (-0)
 >300 [7620] = ±.25% L/D

ALL DIMENSIONS ARE FOR REFERENCE ONLY. DIMENSIONS OF PARTS MAY VARY. DIMENSIONS AND TOLERANCES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.