

N Male to N Female 18GHz Phase & Amplitude Stable Cable Assembly 150CM Length

PECN3TC0002-150CM

Configuration

- Connector 1: N Male
- Connector 2: N Female
- Coax Flex Type: Flexible

Features

- Max Frequency 18 GHz
- Shielding Effectivity > 90 dB
- 83% Phase Velocity
- Designed for use as VNA test port extenders
- Highly flexible armored cable construction
- 1.30:1 VSWR to 18 GHz
- Excellent amplitude and phase stability with flexure
- Non-conductive protective Nomex outer sleeve
- Each serialized assembly comes with test data
- In-stock and ready to ship same-day

Applications

- General Purpose
- Laboratory Use
- Vector Network analyzer test port extenders
- Semiconductor probe testing
- Precise bench-top testing
- Lab and production testing

Description

Pasternack's PECN3TC0002-150CM type N male to type N female cable using 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 type N to type N cable assembly has a male to female gender configuration with 50 ohm flexible coax. The PECN3TC0002-150CM type N male to type N female cable assembly operates to 18 GHz. Pasternack high performance high flex VNA test cables are designed to provide customers repeatable and accurate VNA measurements. These Test cables have excellent electrical properties including low Insertion Loss, low VSWR and phase stability of +/- 5jā with flexure. The flexibility of these cables makes it easier and safer to test your Device Under Test (DUT).? When used with the appropriate calibration kit, these test cables effectively extend the test port of the VNA allowing for accurate measurements of devices that cannot be directly connected to a network analyzer test port.

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 | | 18 | GHz |
| VSWR | | | 1.3:1 | |
| Velocity of Propagation | | 83 | | % |
| RF Shielding | 90 | | | dB |

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Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|----------------------------------|---------|----------|---------|--------------|
| Group Delay | | 1.22 [4] | | ns/ft [ns/m] |
| Operating Voltage (AC) | | | 250 | Vrms |
| Input Power (Average) | | | 197 | Watts |
| Phase Stability with Flexure | | 5 | | Degrees |
| Amplitude Stability with Flexure | | 0.05 | | dB |

Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|------|------|------|----|-----|-------|
| Frequency | 5 | 10 | 18 | | | GHz |
| Insertion Loss (Max.) | 1.09 | 1.55 | 2.11 | | | dB/ft |
| | 3.58 | 5.09 | 6.92 | | | dB/m |
| Power Handling (Max.) | | | | | 197 | Watts |

Electrical Specification Notes:
Values at 25°C, sea level.

Mechanical Specifications

Cable Assembly

Width/Diameter 0 in [0 mm]

Cable

Impedance 50 Ohms
 Inner Conductor Type Solid
 Inner Conductor Material and Plating Copper, Silver
 Dielectric Type PTFE
 Number of Shields 1
 Jacket Diameter 0.313 in [7.95 mm]
 One Time Minimum Bend Radius 1.57 in [39.88 mm]
 Repeated Minimum Bend Radius 3.15 in [80.01 mm]

Connectors

| Description | Connector 1 | Connector 2 |
|-----------------------------------|----------------------------|----------------------------|
| Type | N Male | N Female |
| Impedance | 50 Ohms | 50 Ohms |
| Configuration | Straight | Straight |
| Contact Material and Plating | Beryllium Copper, Gold | Beryllium Copper, Gold |
| Dielectric Type | PEEK&PEI | PEEK&PEI |
| Body Material and Plating | Passivated Stainless Steel | Passivated Stainless Steel |
| Coupling Nut Material and Plating | Passivated Stainless Steel | Passivated Stainless Steel |

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Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

Plotted and Other Data

Notes:
Values at 25°C, sea level.

Typical Performance Data

How to Order

Part Number Configuration: **PECN3TC0002 - xx uu**

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

Example: PECN3TC0002-12 = 12 inches long cable
PECN3TC0002-100cm = 100 cm long cable

N Male to N Female 18GHz Phase & Amplitude Stable Cable Assembly 150CM Length 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.

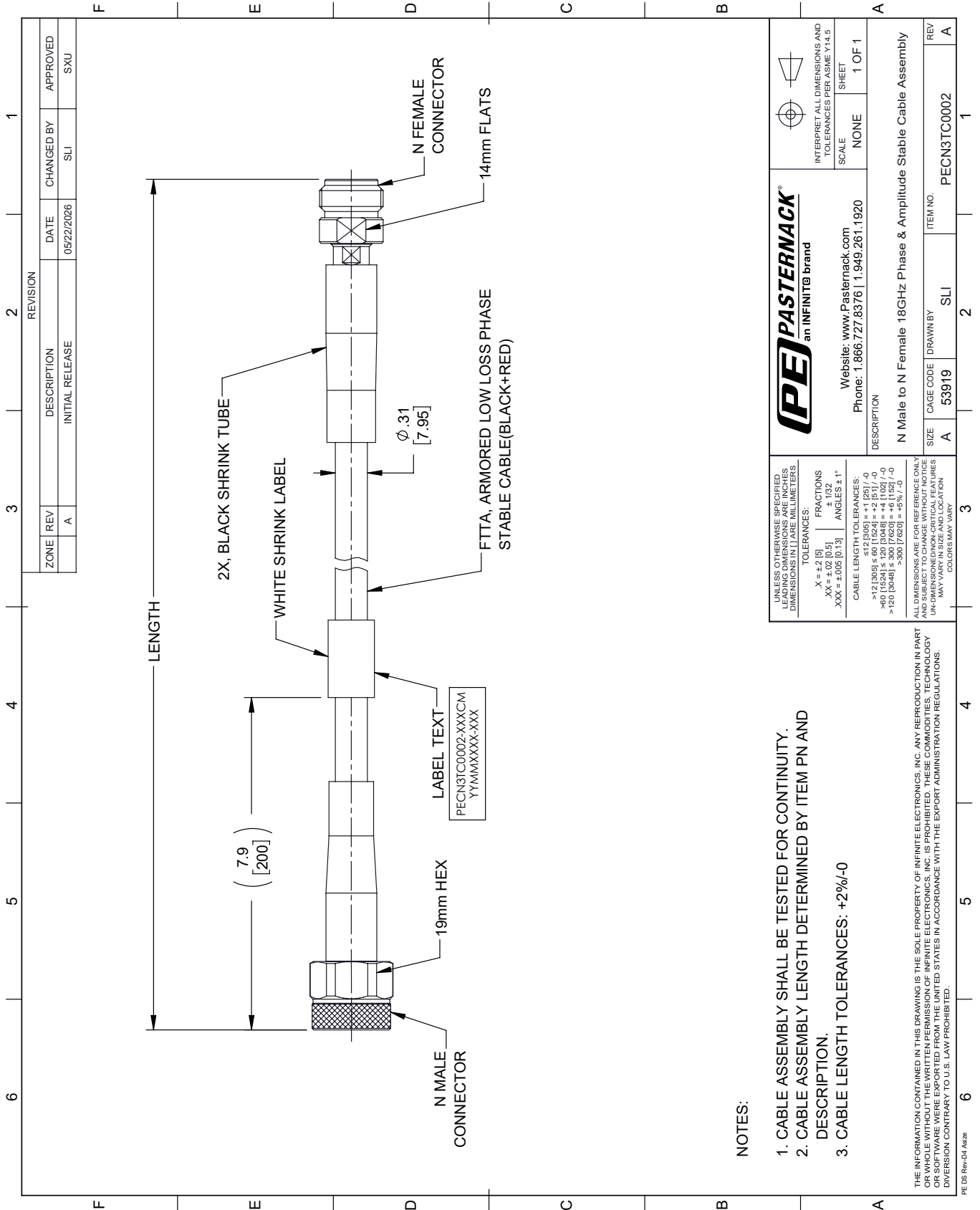
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male to N Female 18GHz Phase & Amplitude Stable Cable Assembly 150CM Length PECN3TC0002-150CM](#)

URL: <https://www.pasternack.com/N-male-N-female-vna-cable-cable-assembly-PECN3TC0002-150cm-p.aspx>

The information contained within 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 Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

PECN3TC002-150CM CAD Drawing

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NOTES:

1. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
2. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.
3. CABLE LENGTH TOLERANCES: +2%/-0