

## N Male to N Male Low PIM Cable 24 Inch Length Using TFT-5G-402 Coax Using Times Microwave Components

### PE3C7998-24



#### Configuration

- Connector 1: N Male
- Connector 2: N 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
- 500 Mating Cycles



#### Applications

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

#### Description

Pasternack's PE3C7998-24 type N male to type N male 24 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 type N to type N cable assembly has a male to male gender configuration with 50 ohm flexible TFT-5G-402 coax. The PE3C7998-24 type N male to type N 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   |
| IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz |         |         |         |       |

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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.) | 0.24 | 0.31 | 0.42 | 0.72 | 1.09 | 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  $0.1 \cdot \sqrt{F(\text{GHz})}$  dB per connector.

#### Mechanical Specifications

##### Cable Assembly

|                |                   |
|----------------|-------------------|
| Length         | 24 in [609.6 mm]  |
| Width/Diameter | .88 in [20.52 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                               | N Male           | N Male           |
| Impedance                          | 50 Ohms          | 50 Ohms          |
| Configuration                      | Straight         | Straight         |
| Mating Cycles                      | 500              | 500              |
| Contact Material and Plating       | Brass, Silver    | Brass, Silver    |
| Contact Plating Specification      | 200 µin          | 200 µin          |
| Dielectric Type                    | PTFE             | PTFE             |
| Body Material and Plating          | Brass, Tri-Metal | Brass, Tri-Metal |
| Body Plating Specification         | 80 µin           | 80 µin           |
| Coupling Nut Material and Plating  | Brass, Tri-Metal | Brass, Tri-Metal |
| Coupling Nut Plating Specification | 80 µin           | 80 µin           |
| Torque                             | 15 in-lbs 1.7 Nm | 15 in-lbs 1.7 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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### PE3C7998-24

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**PE3C7998**

**- xx**

**uu**

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3C7998-12 = 12 inches long cable  
PE3C7998-100cm = 100 cm long cable

N Male to N Male Low PIM Cable 24 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: [N Male to N Male Low PIM Cable 24 Inch Length Using TFT-5G-402 Coax Using Times Microwave Components PE3C7998-24](https://www.pasternack.com/n-male-to-n-male-low-pim-cable-24-inch-length-using-tft-5g-402-pe3c7998-24-p.aspx)

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PE3C7998-24 CAD Drawing

N Male to N Male Low PIM Cable 24 Inch Length Using TFT-5G-402 Coax Using Times Microwave Components

