

N Male to N Male Cable Using RG225 Coax



PE3W12986

Configuration

- Connector 1: N Male
- Connector 2: N Male
- Cable Type: RG225
- Coax Flex Type: Flexible

Features

- Max Frequency 10 GHz
- 70% Phase Velocity
- Double Shielded
- PTFE (FG) Jacket

Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W12986 type N male to type N male cable using RG225 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 RG225 coax. The PE3W12986 type N male to type N male cable assembly operates to 10 GHz. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness.

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 | | 10 | GHz |
| VSWR | | | 1.4:1 | |
| Velocity of Propagation | | 70 | | % |
| Capacitance | | 29.4 [96.46] | | pF/ft [pF/m] |
| Operating Voltage (AC) | | | 1,000 | Vrms |

Specifications by Frequency

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| Part Number | Length | Description | F1 | F2 | F3 | F4 | F5 | Units | Weight (lbs) |
|--------------|--------------------------|-----------------------|------|------|------|------|-------|-------|--------------|
| | | | 500 | 1000 | 2500 | 5000 | 10000 | MHz | |
| PE3W12986 | Custom Lengths Available | Insertion Loss (Typ.) | 0.05 | 0.08 | 0.13 | 0.21 | 0.35 | dB/ft | |
| | | | 0.15 | 0.25 | 0.42 | 0.69 | 1.15 | dB/m | |
| PE3W12986-24 | 24 inch | Insertion Loss (Typ.) | 0.29 | 0.35 | 0.45 | 0.62 | 0.9 | dB | 0.579 |
| PE3W12986-36 | 36 inch | Insertion Loss (Typ.) | 0.34 | 0.43 | 0.58 | 0.83 | 1.25 | dB | 0.752 |
| PE3W12986-48 | 48 inch | Insertion Loss (Typ.) | 0.38 | 0.5 | 0.7 | 1.04 | 1.6 | dB | 0.925 |
| PE3W12986-60 | 60 inch | Insertion Loss (Typ.) | 0.43 | 0.58 | 0.83 | 1.25 | 1.95 | dB | 1.098 |
| PE3W12986-72 | 72 inch | Insertion Loss (Typ.) | 0.47 | 0.65 | 0.95 | 1.46 | 2.3 | dB | 1.271 |

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: | 0.405 pounds |
| Additional Weight per Inch: | 0.01442 pounds |

Mechanical Specifications

Cable Assembly

| | |
|----------------|---------------------|
| Width/Diameter | 0.5 in [12.7 mm] |
| Weight | 0.405 lbs [183.7 g] |

Cable

| | |
|--------------------------------------|----------------------------|
| Cable Type | RG225 |
| Impedance | 50 Ohms |
| Inner Conductor Type | Stranded |
| Inner Conductor Material and Plating | Copper, Silver |
| Dielectric Type | PTFE |
| Number of Shields | 2 |
| Shield Layer 1 | Silver Plated Copper Braid |
| Shield Layer 2 | Silver Plated Copper Braid |
| Jacket Material | PTFE (FG), Tan |
| Jacket Diameter | 0.43 in [10.92 mm] |

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Connectors

| Description | Connector 1 | Connector 2 |
|------------------------------------|-----------------|-----------------|
| Type | N Male | N Male |
| Impedance | 50 Ohms | 50 Ohms |
| Configuration | Straight | Straight |
| Contact Material and Plating | Brass, Gold | Brass, Gold |
| Contact Plating Specification | 30 µin minimum | 30 µin minimum |
| Dielectric Type | PTFE | PTFE |
| Body Material and Plating | Brass, Nickel | Brass, Nickel |
| Body Plating Specification | 100 µin minimum | 100 µin minimum |
| Coupling Nut Material and Plating | Brass, Nickel | Brass, Nickel |
| Coupling Nut Plating Specification | 100 µin minimum | 100 µin minimum |

Environmental Specifications

Operating Range Temperature -55 to +165 deg C

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

Plotted and Other Data

Notes:



N Male to N Male Cable Using RG225 Coax

PE3W12986

Typical Performance Data

How to Order

Part Number Configuration:

PE3W12986

- **xx**

uu

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3W12986-12 = 12 inches long cable
PE3W12986-100cm = 100 cm long cable

N Male to N Male Cable Using RG225 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.

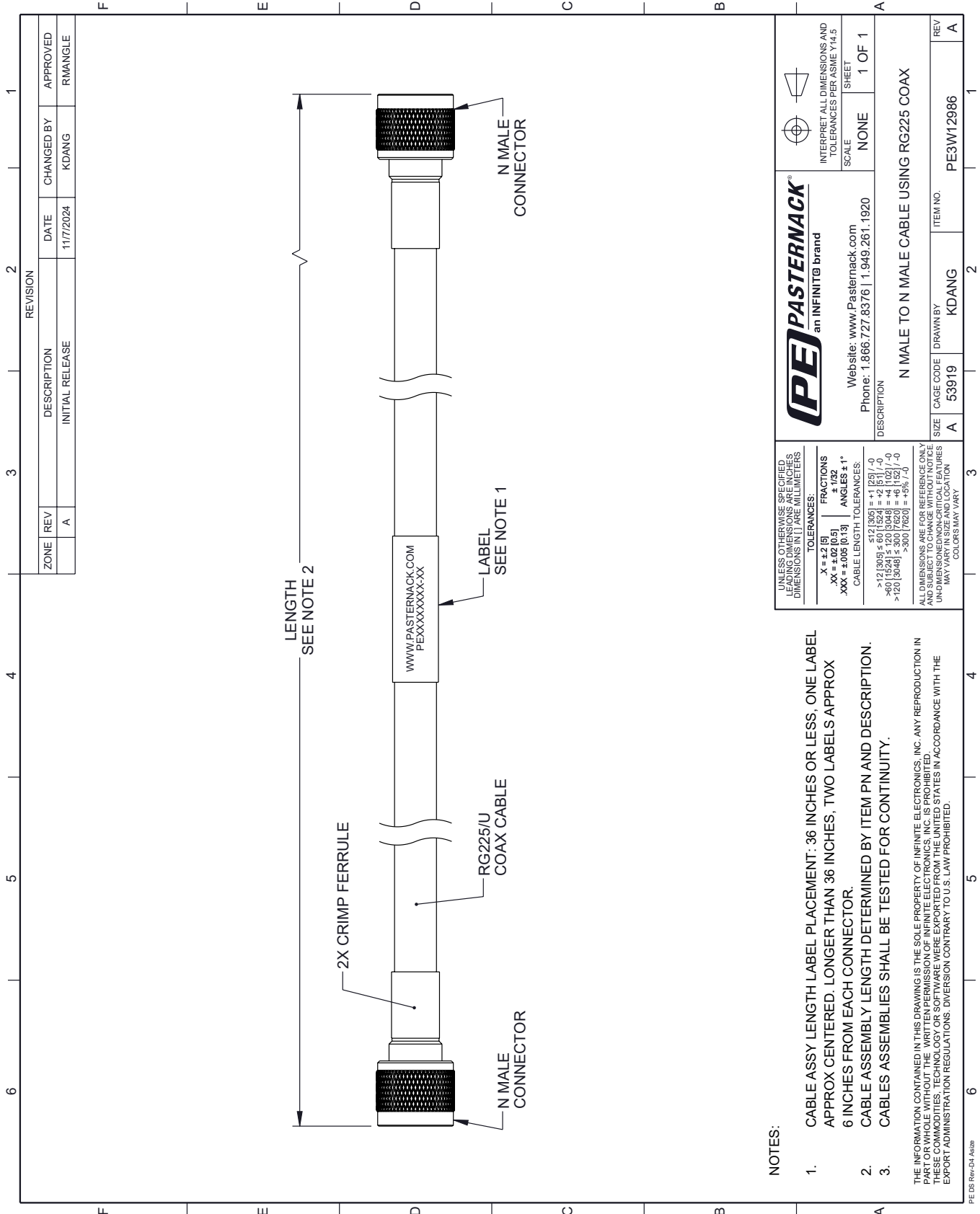
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male to N Male Cable Using RG225 Coax PE3W12986](#)

URL: <https://www.pasternack.com/n-male-to-n-male-cable-using-rg225-pe3w12986-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.

PE3W12986 CAD Drawing

N Male to N Male Cable Using RG225 Coax






NOTES:

- CABLE ASSY LENGTH LABEL PLACEMENT: .36 INCHES OR LESS, ONE LABEL APPROX CENTERED. LONGER THAN .36 INCHES, TWO LABELS APPROX .6 INCHES FROM EACH CONNECTOR.
- CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.
- CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

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PE DS Rev-D4-A320

| | | |
|---|-----------------|---|
|  PASTERNAK an INFINITE brand | |   |
| Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920 | | INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE NONE SHEET 1 OF 1 |
| DESCRIPTION N MALE TO N MALE CABLE USING RG225 COAX | | |
| SIZE A | CAGE CODE 53919 | DRAWN BY KDANG |
| ITEM NO. PE3W12986 | | REV A |

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] ± .60 [1524] = +.2 [51] / -0
 > 12 [305] ± .60 [1524] = +.4 [1027] / -0
 > 20 [508] ± .30 [762] = +.5% / -0
 > 30 [762] ± .5% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.