

## 4.3-10 Male to N Male Low PIM Cable Using 1/4 inch Superflexible Coax



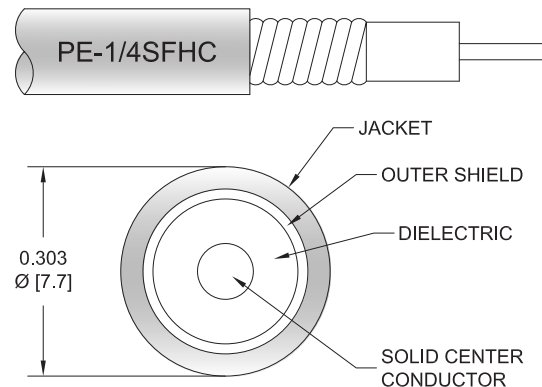
### PE3W13585

#### Configuration

- Connector 1: 4.3-10 Male
- Connector 2: N Male
- Cable Type: 1/4" Superflexible
- Coax Flex Type: Corrugated

#### Features

- Max Frequency 3 GHz
- Low PIM: -160 dBc Max
- Shielding Effectivity > 120 dB
- 82% Phase Velocity
- PE Jacket



#### Applications

- General Purpose
- Laboratory Use
- Low PIM Applications

#### Description

Pasternack's PE3W13585 4.3-10 male to type N male cable using 1/4 inch superflexible coax is part of our full line of RF components available for same-day shipping. Pasternack's corrugated RF cable assemblies are ideal for applications where durability and high power are needed. This Pasternack 4.3-10 to type N cable assembly has a male to male gender configuration with 50 ohm corrugated 1/4" superflexible coax. The PE3W13585 4.3-10 male to type N male cable assembly operates to 3 GHz. Our low PIM design also offers excellent passive intermodulation performance with PIM levels better than -160 dBc.

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  |         |              | 1.27:1  |                       |
| Velocity of Propagation   |         | 82           |         | %                     |
| RF Shielding  | 120     |              |         | dB                    |
| Passive Intermodulation<br>IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz |         |              | -160    | dBc                   |
| Capacitance   |         | 24.4 [80.05] |         | pF/ft [pF/m]          |
| Inductance  |         | 0.059 [0.19] |         | uH/ft [uH/m]          |
| DC Resistance Inner Conductor   |         | 3.2 [10.5]   |         | Ohms/1000ft [Ohms/Km] |
| DC Resistance Outer Conductor   |         | 2.53 [8.3]   |         | Ohms/1000ft [Ohms/Km] |

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#### Electrical Specifications

| Description  | Minimum | Typical | Maximum | Units |
|--------------|---------|---------|---------|-------|
| Jacket Spark |         |         | 2,000   | Vrms  |

#### Specifications by Frequency

| Part Number  | Length                   | Description           | F1    | F2    | F3    | F4    | F5    | Units | Weight (lbs) |
|--------------|--------------------------|-----------------------|-------|-------|-------|-------|-------|-------|--------------|
|              |                          | Frequency             | 100   | 250   | 500   | 1000  | 3000  | MHz   |              |
| PE3W13585    | Custom Lengths Available | Insertion Loss (Typ.) | 0.016 | 0.027 | 0.039 | 0.058 | 0.107 | dB/ft |              |
|              |                          |                       | 0.06  | 0.09  | 0.13  | 0.2   | 0.36  | dB/m  |              |
| PE3W13585-12 | 12 inch                  | Insertion Loss (Typ.) | 0.32  | 0.33  | 0.34  | 0.36  | 0.41  | dB    | 0.312        |
| PE3W13585-24 | 24 inch                  | Insertion Loss (Typ.) | 0.34  | 0.36  | 0.38  | 0.42  | 0.52  | dB    | 0.354        |
| PE3W13585-36 | 36 inch                  | Insertion Loss (Typ.) | 0.35  | 0.39  | 0.42  | 0.48  | 0.63  | dB    | 0.396        |
| PE3W13585-48 | 48 inch                  | Insertion Loss (Typ.) | 0.37  | 0.41  | 0.46  | 0.54  | 0.73  | dB    | 0.438        |
| PE3W13585-60 | 60 inch                  | Insertion Loss (Typ.) | 0.38  | 0.44  | 0.5   | 0.59  | 0.84  | dB    | 0.48         |

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:    | 0.2 dB        |
| Loss due to Connector 2:    | 0.1 dB        |
| Base Weight:                | 0.312 pounds  |
| Additional Weight per Inch: | 0.0035 pounds |

#### Mechanical Specifications

##### Cable Assembly

|                |                      |
|----------------|----------------------|
| Width/Diameter | 0.5 in [12.7 mm]     |
| Weight         | 0.312 lbs [141.52 g] |

##### Cable

|                                      |                                  |
|--------------------------------------|----------------------------------|
| Cable Type                           | 1/4" Superflexible               |
| Impedance                            | 50 Ohms                          |
| Inner Conductor Type                 | Solid                            |
| Inner Conductor Material and Plating | Copper Clad Aluminum             |
| Dielectric Type                      | PE (F)                           |
| Number of Shields                    | 1                                |
| Shield Layer 1                       | Helically Corrugated Copper Tube |
| Jacket Material                      | PE, Black                        |
| Jacket Diameter                      | 0.303 in [7.7 mm]                |
| One Time Minimum Bend Radius         | 0.5 in [12.7 mm]                 |
| Repeated Minimum Bend Radius         | 1 in [25.4 mm]                   |
| Typical Flex Cycles                  | 20                               |
| Tensile Strength                     | 79 lbs [35.83 Kg]                |

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### PE3W13585

#### Connectors

| Description                           | Connector 1      | Connector 2           |
|---------------------------------------|------------------|-----------------------|
| Type                                  | 4.3-10 Male      | N Male                |
| Specification                         |                  | IEC 60169-16          |
| Impedance                             | 50 Ohms          | 50 Ohms               |
| Configuration                         | Straight         | Straight              |
| Contact Material and Plating          | Brass, Silver    | Spring Copper, Silver |
| Contact Plating Specification         |                  | 5 µm minimum          |
| Dielectric Type                       | PTFE             | PTFE                  |
| Outer Conductor Material and Plating  |                  | Brass, Nickel         |
| Outer Conductor Plating Specification |                  | 5 µm minimum          |
| Body Material and Plating             | Brass, Tri-Metal | Brass, Tri-Metal      |
| Body Plating Specification            |                  | 2 µm minimum          |
| Coupling Nut Material and Plating     | Brass, Tri-Metal | Brass, Nickel         |
| Coupling Nut Plating Specification    |                  | 5 µm minimum          |
| Hex Size                              |                  | 19 mm                 |

#### Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

#### Plotted and Other Data

Notes:

## 4.3-10 Male to N Male Low PIM Cable Using 1/4 inch Superflexible Coax



### PE3W13585

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**PE3W13585**

**- xx**

**uu**

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3W13585-12 = 12 inches long cable  
PE3W13585-100cm = 100 cm long cable

4.3-10 Male to N Male Low PIM Cable Using 1/4 inch Superflexible 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.

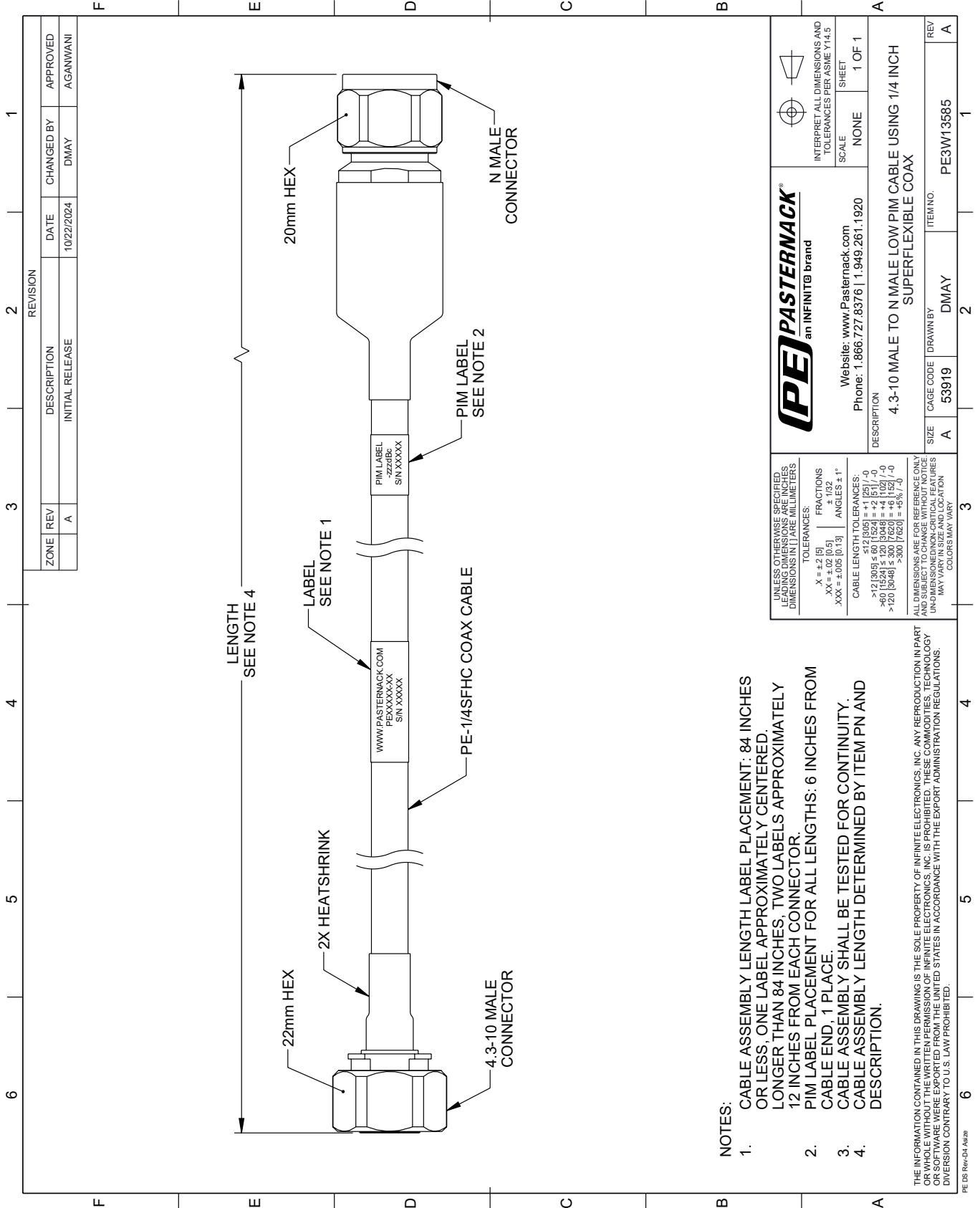
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [4.3-10 Male to N Male Low PIM Cable Using 1/4 inch Superflexible Coax PE3W13585](#)

URL: <https://www.pasternack.com/4.3-10-male-to-n-male-low-pim-cable-using-1-4-inch-superflexible-pe3w13585-p.aspx>

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# PE3W13585 CAD Drawing

## 4.3-10 Male to N Male Low PIM Cable Using 1/4 inch Superflexible Coax



**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 ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
4. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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PE DS Rev-D4 Add2

| REVISION |     | DATE            | CHANGED BY | APPROVED   |          |
|----------|-----|-----------------|------------|------------|----------|
| ZONE     | REV | DESCRIPTION     | DATE       | CHANGED BY | APPROVED |
|          | A   | INITIAL RELEASE | 10/22/2024 | DMAY       | AGANWANI |

|   |           |  |
|---|-----------|--|
|   |           |  |
| Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a><br>Phone: 1.866.727.8376   1.949.261.1920 |           | INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5<br>SCALE: NONE<br>SHEET: 1 OF 1 |
| DESCRIPTION<br>4.3-10 MALE TO N MALE LOW PIM CABLE USING 1/4 INCH SUPERFLEXIBLE COAX                          |           |  |
| SIZE  | CAGE CODE | ITEM NO.   |
| A   | 53919     | PE3W13585  |
| REV   | REV       | REV  |
| A   | A         | 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] = ±.1 [2.5] / -0  
 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0  
 >120 [3048] ≤ 300 [7620] = ±.6 [15.2] / -0  
 >300 [7620] = ±.6 [15.2] / -0

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