



## 3.5mm Male to 3.5mm Male Test Cable 60 Inch Length Using VNA Test Cable Coax, LF Solder, RoHS

### RF Cable Assemblies Technical Data Sheet

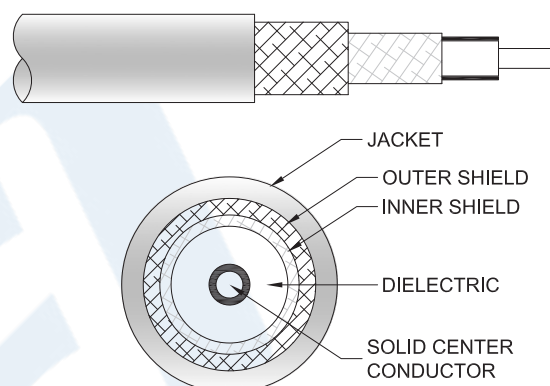
**PE315-60**

#### Configuration

- Connector 1: 3.5mm Male
- Connector 2: 3.5mm Male
- Cable Type: VNA Cable

#### Features

- Max Frequency 26.5 GHz
- 77% Phase Velocity
- Double Shielded
- FEP Jacket



#### Applications

- General Purpose
- Test & Measurement
- Laboratory Use

#### Description

Pasternack's PE315-60 3.5mm male to 3.5mm male test 60 inch cable using VNA test cable 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 3.5mm to 3.5mm cable assembly has a male to male gender configuration with 50 ohm flexible VNA cable coax. The PE315-60 3.5mm male to 3.5mm male cable assembly operates to 26.5 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      |         | 26.5    | GHz   |
| Return Loss                          |         |         | -18     | dB    |
| Velocity of Propagation              |         | 77      |         | %     |
| Dielectric Withstanding Voltage (AC) |         |         | 1,000   | Vrms  |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [3.5mm Male to 3.5mm Male Test Cable 60 Inch Length Using VNA Test Cable Coax, LF Solder, RoHS PE315-60](#)



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#### Specifications by Frequency

| Description           | F1  | F2   | F3  | F4   | F5 | Units |
|-----------------------|-----|------|-----|------|----|-------|
| Frequency             | 1   | 10   | 18  | 26.5 |    | GHz   |
| Insertion Loss (Max.) | 0.4 | 1.45 | 2   | 2.5  |    | dB    |
| Return Loss (Max.)    | -30 | -25  | -20 | -18  |    | dB    |
| Power Handling (Max.) |     | 286  |     |      |    | Watts |

#### Electrical Specification Notes:

Shielding effectiveness > 100 dB at 1 GHz.

Insertion loss does not include the loss of the connectors.

Insertion loss is estimated as  $0.05 \times \sqrt{f(\text{GHz})}$  dB per connector.

#### Mechanical Specifications

##### Cable Assembly

|          |                      |
|----------|----------------------|
| Length*  | 60 in [152.4 cm]     |
| Diameter | 0.47 in [11.94 mm]   |
| Weight   | 0.975 lbs [442.25 g] |

##### Cable

|                                      |                            |
|--------------------------------------|----------------------------|
| Cable Type                           | VNA Cable                  |
| Impedance                            | 50 Ohms                    |
| Inner Conductor Type                 | Solid                      |
| Inner Conductor Material and Plating | Copper, Silver             |
| Dielectric Type                      | PTFE                       |
| Number of Shields                    | 2                          |
| Shield Layer 1                       | Silver Plated Copper Tape  |
| Shield Layer 2                       | Silver Plated Copper Braid |
| Jacket Material                      | FEP                        |

|                              |                    |
|------------------------------|--------------------|
| Repeated Minimum Bend Radius | 1.38 in [35.05 mm] |
| Typical Flex Cycles          | 10,000             |

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### Connectors

| Description                       | Connector 1                | Connector 2                |
|-----------------------------------|----------------------------|----------------------------|
| Type                              | 3.5mm Male                 | 3.5mm Male                 |
| Specification                     | MIL-STD-348                | MIL-STD-348                |
| Impedance                         | 50 Ohms                    | 50 Ohms                    |
| Contact Material and Plating      | Gold                       | Gold                       |
| Dielectric Type                   | PPO                        | PPO                        |
| Body Material and Plating         | Passivated Stainless Steel | Passivated Stainless Steel |
| Coupling Nut Material and Plating | Passivated Stainless Steel | Passivated Stainless Steel |
| Hex Size                          | 5/16 inch                  | 5/16 inch                  |
| Torque                            | 8 in-lbs [0.9 Nm]          | 8 in-lbs [0.9 Nm]          |

Mechanical Specification Notes:

\*All cable assemblies have a length tolerance of 1.5% or  $\pm 3/8"$ , whichever is greater.

### Environmental Specifications

#### Temperature

Operating Range -55 to +165 deg C

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

### Plotted and Other Data

Notes:

- Values at 25°C, sea level.

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## RF Cable Assemblies Technical Data Sheet

**PE315-60**

### How to Order

Part Number Configuration:

**PE315**

- **xx**

**uu**

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

Example: PE315-12 = 12 inches long cable  
PE315-100cm = 100 cm long cable

3.5mm Male to 3.5mm Male Test Cable 60 Inch Length Using VNA Test Cable Coax, LF Solder, RoHS from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

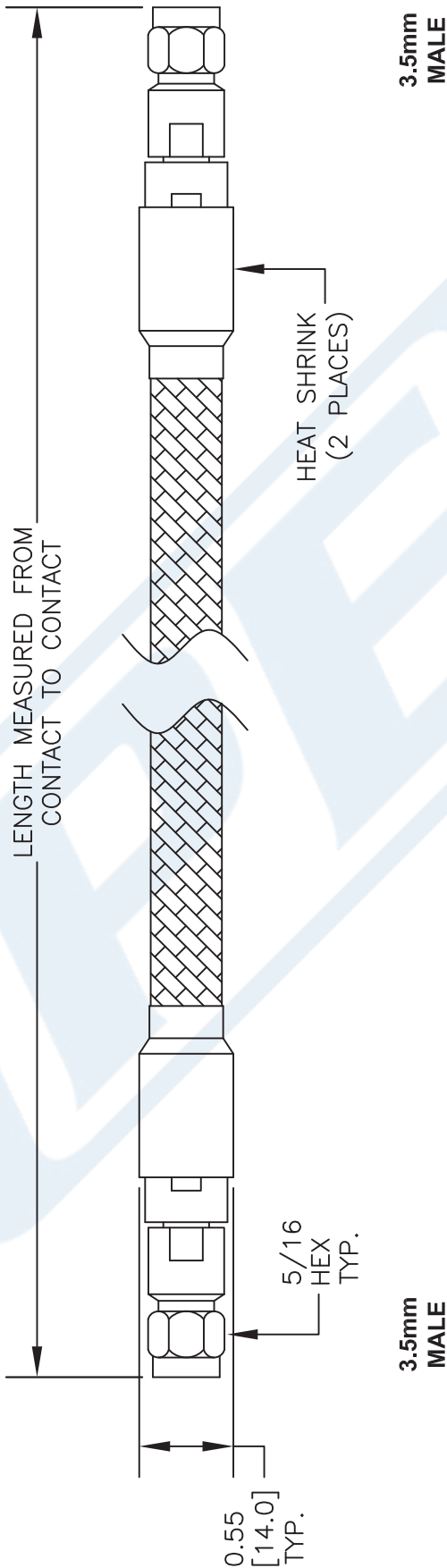
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URL: <https://www.pasternack.com/3.5mm-male-3.5mm-male-vna-cable-cable-assembly-pe315-60-p.aspx>

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

PE315-60 CAD Drawing

3.5mm Male to 3.5mm Male Test Cable 60 Inch Length  
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| STANDARD TOLERANCES |       |
|---------------------|-------|
| .X                  | ±0.2  |
| .XX                 | ±0.1  |
| .XXX                | ±0.05 |

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

|                                                                                                                                                                                                                                       |                           |                                                                                                                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>PE PASTERNAK®</b><br>THE ENGINEER'S RF SOURCE<br>Pasternack Enterprises, Inc.<br>P.O. Box 16759   Irvine   CA   92623<br>Phone: (949) 261-1920   Fax: (949) 261-7451<br>Website: www.pasternack.com   E-Mail: sales@pasternack.com | DWG TITLE<br><b>PE315</b> | NOTES:<br>1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.<br>2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.<br>3. DIMENSIONS ARE IN INCHES [mm]. |
| FSCM NO. 53919                                                                                                                                                                                                                        | CAD FILE 110816           | SCALE N/A                                                                                                                                                                           |
| SIZE A                                                                                                                                                                                                                                | 41742                     |                                                                                                                                                                                     |