



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

### RF Cable Assemblies Technical Data Sheet

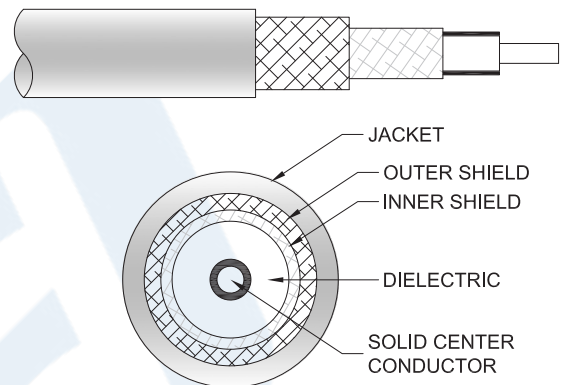
PE315

#### 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 3.5mm male to 3.5mm male test 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 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 Using VNA Test Cable Coax, LF Solder, RoHS PE315](#)



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#### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	1	10	18	26.5		GHz
Insertion Loss (Max.)	0.08 [0.26]	0.29 [0.95]	0.4 [1.31]	0.5 [1.64]		dB/ft [dB/m]
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 x sqrt(fGHz) dB per connector.

#### Mechanical Specifications

##### Cable Assembly

Diameter 0.47 in [11.94 mm]

Weight 0.42 lbs [190.51 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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## 3.5mm Male to 3.5mm Male Test Cable Using VNA Test Cable Coax, LF Solder, RoHS

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PE315

#### 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 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.

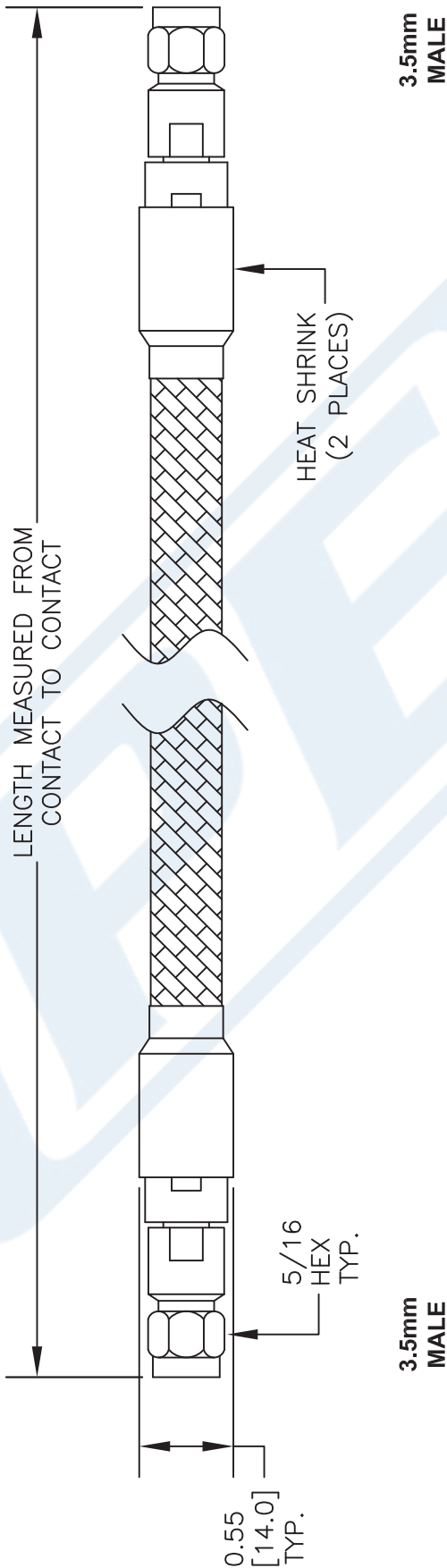
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URL: <https://www.pasternack.com/3.5mm-male-3.5mm-male-vna-cable-cable-assembly-pe315-p.aspx>

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 CAD Drawing

3.5mm Male to 3.5mm Male Test Cable Using VNA Test Cable Coax, LF Solder, RoHS



STANDARD TOLERANCES	
.X	±0.2
.XX	±0.1
.XXX	±0.05

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

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