

2.92mm Male to 2.92mm Male Cable Using PE-P086HF Coax

RF Cable Assemblies Technical Data Sheet

PE3C5117

Configuration

- Connector 1: 2.92mm Male
- Connector 2: 2.92mm Male
- Cable Type: PE-P086HF

Features

- Max Frequency 40 GHz
- 70% Phase Velocity
- Double Shielded
- FEP Jacket
- 500 Mating Cycles

Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C5117 2.92mm male to 2.92mm male cable using PE-P086HF 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 2.92mm to 2.92mm cable assembly has a male to male gender configuration with 50 ohm flexible PE-P086HF coax. The PE3C5117 2.92mm male to 2.92mm male cable assembly operates to 40 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [2.92mm Male to 2.92mm Male Cable Using PE-P086HF Coax PE3C5117](#)

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Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-------------------------|---------|--------------|---------|--------------|
| Frequency Range | DC | | 40 | GHz |
| VSWR | | | 1.4:1 | |
| Velocity of Propagation | | 70 | | % |
| Capacitance | | 29.4 [96.46] | | pF/ft [pF/m] |

Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|--------|--------|--------|--------|--------|-------|
| Frequency | 2.5 | 5 | 20 | 30 | 40 | GHz |
| Insertion Loss (Max.) | 1.3 | 1.5 | 2 | 2.3 | 2.6 | dB |
| | 4.3 | 4.79 | 6.59 | 7.48 | 8.37 | |
| VSWR (Max.) | 1.26:1 | 1.26:1 | 1.3:1 | 1.4:1 | 1.39:1 | |
| Return Loss (Max.) | 18.96 | 18.962 | 17.717 | 15.728 | 15.747 | dB |

Mechanical Specifications

Cable Assembly

| | |
|----------|---------------------|
| Length* | 0 in [0 mm] |
| Diameter | 0 in [0 mm] |
| Weight | 0.039 lbs [17.69 g] |

Cable

| | |
|--------------------------------------|----------------------------|
| Cable Type | PE-P086HF |
| Impedance | 50 Ohms |
| Inner Conductor Type | Solid |
| Inner Conductor Material and Plating | Copper Clad Steel, 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, Blue |
| Jacket Diameter | 0.104 in [2.64 mm] |

| | |
|------------------------------|--------------------|
| One Time Minimum Bend Radius | 0.52 in [13.21 mm] |
|------------------------------|--------------------|

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Connectors

| Description | Connector 1 | Connector 2 |
|------------------------------------|------------------------------------|------------------------------------|
| Type | 2.92mm Male | 2.92mm Male |
| Impedance | 50 Ohms | 50 Ohms |
| Mating Cycles | 500 | 500 |
| Contact Material and Plating | Beryllium Copper, Gold over Nickel | Beryllium Copper, Gold over Nickel |
| Contact Plating Specification | 50 µin minimum | 50 µin minimum |
| Dielectric Type | PCTFE | PCTFE |
| Body Material and Plating | Passivated Stainless Steel | Passivated Stainless Steel |
| Body Plating Specification | SAE-AMS-2700 | SAE-AMS-2700 |
| Coupling Nut Material and Plating | Passivated Stainless Steel | Passivated Stainless Steel |
| Coupling Nut Plating Specification | SAE-AMS-2700 | SAE-AMS-2700 |
| Hex Size | 5/16 inch | 5/16 inch |
| Torque | 8 in-lbs [0.9 Nm] | 8 in-lbs [0.9 Nm] |

Environmental Specifications

Temperature

Operating Range -55 to +165 deg C

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

Plotted and Other Data

Notes:

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How to Order

Part Number Configuration:

PE3C5117

- **xx**

uu

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3C5117-12 = 12 inches long cable
PE3C5117-100cm = 100 cm long cable

2.92mm Male to 2.92mm Male Cable Using PE-P086HF 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: [2.92mm Male to 2.92mm Male Cable Using PE-P086HF Coax PE3C5117](#)

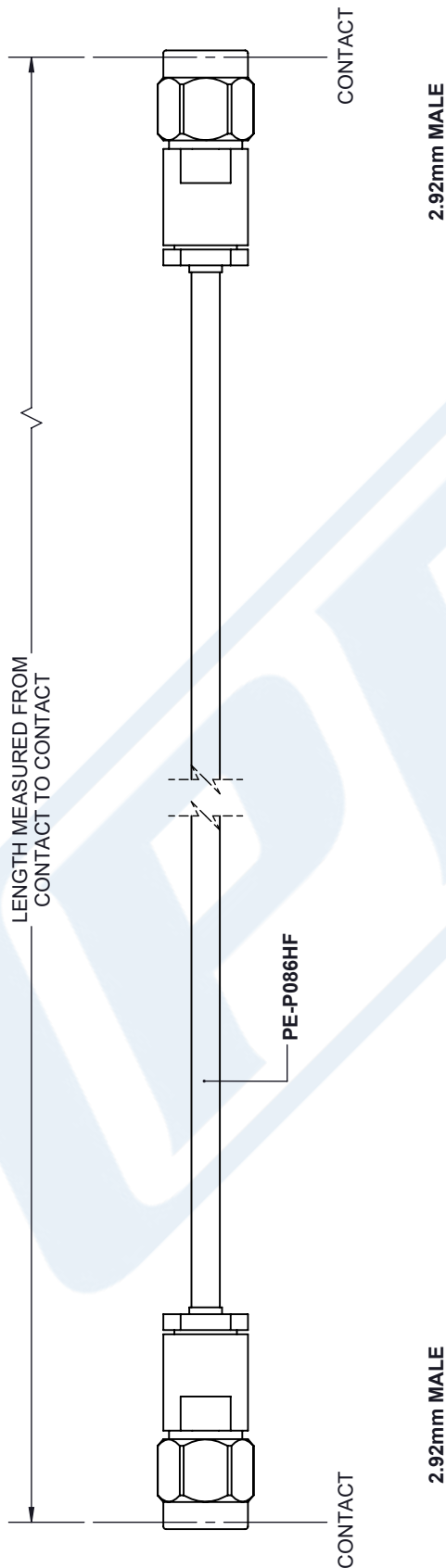
URL: <https://www.pasternack.com/2.92mm-male-2.92mm-male-pe-p086hf-cable-assembly-pe3c5117-p.aspx>

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.

PE3C5117 CAD Drawing

2.92mm Male to 2.92mm Male Cable Using PE-P086HF Coax

| REVISIONS | | | |
|-----------|-----------------|------------|------------|
| REV. | DESCRIPTION | DATE | APPROVED |
| A | INITIAL RELEASE | 10/21/2021 | A. GANWANI |



| | | | |
|---|--|------------------|--|
| <p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS</p> <p>TOLERANCES:</p> <p>.X = ±.2 [.008] FRACTIONS ± 1/32 .XX = ±.02 [.51] ANGLES ± 1° .XXX = ±.005 [.13]</p> <p>CABLE LENGTH (L): TOLERANCES: L ≤ 12 [305] = +1 [25] / -0 12 [305] < L ≤ 60 [1524] = +2 [51] / -0 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0 300 [7620] < L = +5% / -0</p> <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p> | <p>PE PASTERNAK an INFINITE brand</p> <p>Pasternack Enterprises, Inc. P. O. Box 16759, Irvine, CA 92623. Phone: 1.949.261.1920 1.866.727.8376 Fax: 1.949.261.7451 Website: www.pasternack.com E-mail: sales@pasternack.com</p> | | <p>THIRD-ANGLE PROJECTION</p> <p>THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION ALL RIGHTS RESERVED.</p> <p>SHEET 1 OF 1</p> |
| | <p>SIZE A CAGE CODE 53919 DRAWN BY K.DANG ITEM NO. PE3C5117</p> | <p>SCALE N/A</p> | <p>REV A</p> |

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