



2.4mm Male to 2.4mm Male Cable 100 cm
Length Using PE-P086HF Coax

RF Cable Assemblies Technical Data Sheet

PE3C0728-100CM

Configuration

- Connector 1: 2.4mm Male
- Connector 2: 2.4mm Male
- Cable Type: PE-P086HF

Features

- Max Frequency 50 GHz
- Shielding Effectivity > 110 dB
- 69.5% Phase Velocity
- Double Shielded
- FEP Jacket

Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C0728-100CM 2.4mm male to 2.4mm male 100 cm 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 2.4mm to 2.4mm cable assembly has a male to male gender configuration with 50 ohm flexible PE-P086HF coax. The PE3C0728-100CM 2.4mm male to 2.4mm male cable assembly operates to 50 GHz. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 110 dB.

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: [2.4mm Male to 2.4mm Male Cable 100 cm Length Using PE-P086HF Coax PE3C0728-100CM](#)



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Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-------------------------|---------|--------------|---------|--------------|
| Frequency Range | DC | | 50 | GHz |
| VSWR | | | 1.4:1 | |
| Return Loss | | | -15.56 | dB |
| Insertion Loss | | | 5.6 | dB |
| Velocity of Propagation | | 69.5 | | % |
| RF Shielding | 110 | | | dB |
| Capacitance | | 29.4 [96.46] | | pF/ft [pF/m] |

Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|-----|-----|-----|-----|-----|-------|
| Frequency | 2.5 | 5 | 10 | 20 | 40 | GHz |
| Insertion Loss (Max.) | 1.3 | 1.8 | 2.5 | 3.7 | 5.6 | dB |
| Insertion Loss (Typ.) | 1.2 | 1.6 | 2.3 | 3.4 | 5 | dB |

Mechanical Specifications

Cable Assembly

| | |
|----------|--------------------|
| Length* | 39.37 in [100 cm] |
| Diameter | 0.312 in [7.92 mm] |
| Weight | 0.056 lbs [25.4 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 |
| Outer Conductor Diameter | 0.104 in [2.64 mm] |
| Jacket Material | FEP, Blue |
| Jacket Diameter | 0.104 in [2.64 mm] |

| | |
|------------------------------|--------------------|
| One Time Minimum Bend Radius | 0.4 in [10.16 mm] |
| Repeated Minimum Bend Radius | 1.57 in [39.88 mm] |

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Connectors

| Description | Connector 1 | Connector 2 |
|------------------------------------|----------------------------|----------------------------|
| Type | 2.4mm Male | 2.4mm Male |
| Impedance | 50 Ohms | 50 Ohms |
| Contact Material and Plating | Beryllium Copper, Gold | Beryllium Copper, Gold |
| Contact Plating Specification | MIL-G-45204 | MIL-G-45204 |
| Dielectric Type | Noryl | Noryl |
| Body Material and Plating | Passivated Stainless Steel | Passivated Stainless Steel |
| Body Plating Specification | ASTM A380 | ASTM A380 |
| Coupling Nut Material and Plating | Passivated Stainless Steel | Passivated Stainless Steel |
| Coupling Nut Plating Specification | ASTM A380 | ASTM A380 |
| Hex Size | 5/16 in. | 5/16 in. |
| 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 -40 to +105 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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How to Order

Part Number Configuration:

PE3C0728

- xx

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

Example: PE3C0728-12 = 12 inches long cable
PE3C0728-100cm = 100 cm long cable

2.4mm Male to 2.4mm Male Cable 100 cm Length 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.

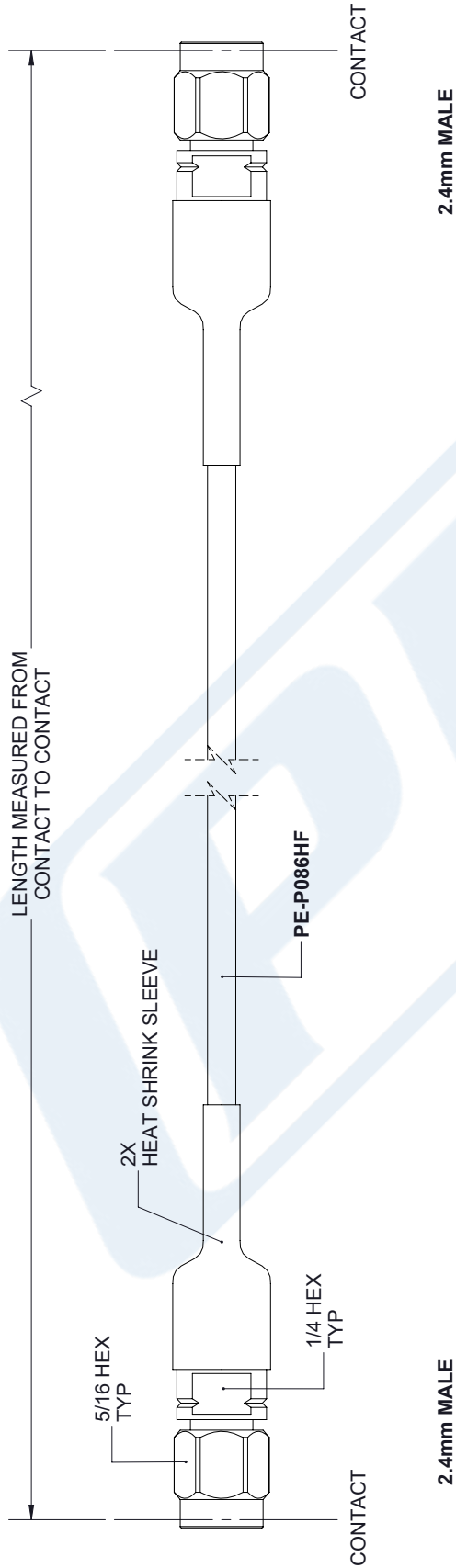
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [2.4mm Male to 2.4mm Male Cable 100 cm Length Using PE-P086HF Coax PE3C0728-100CM](#)

URL: <https://www.pasternack.com/2.4mm-male-2.4mm-male-pe-p086hf-cable-assembly-pe3c0728-100cm-p.aspx>

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PE3C0728-100CM CAD Drawing

2.4mm Male to 2.4mm Male Cable 100 cm Length Using PE-P086HF Coax



| | |
|--|-----------------|
| UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS | |
| TOLERANCES: | FRACTIONS |
| .X = ± .2 | [.08] |
| .XX = ± .02 | [.51] |
| .XXX = ± .005 | [.13] |
| ANGLES | ± 1° |
| 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% L / -0 |
| ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY. | |

| | |
|--|-----------|
| PE PASTERNAK an INFINITI® brand 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 | |
| SIZE | CAGE CODE |
| A | 53919 |
| DRAWN BY | ITEM NO. |
| K.DANG | PE3C0728 |
| REV | A |

| | |
|---|--------|
| THIRD-ANGLE PROJECTION | |
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| SHEET | 1 OF 1 |
| SCALE | N/A |