



2.92mm Male to 2.92mm Male Skew Matched Pair Cable 48 Inch Length Using PE-P141LL Coax

RF Cable Assemblies Technical Data Sheet

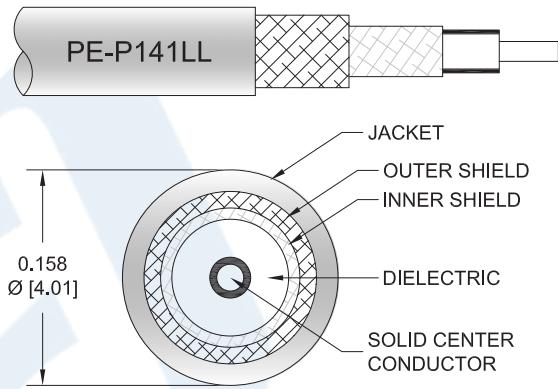
PE3CA2517-48

Configuration

- Connector 1: 2.92mm Male
- Connector 2: 2.92mm Male
- Cable Type: PE-P141LL
- Channels: 2

Features

- Max Frequency 40 GHz
- 87% Phase Velocity
- Double Shielded
- PE Jacket
- Max Frequency 40 GHz
- Double Shielded
- PE Jacket
- 2ps Delay Match
- Excellent VSWR of 1.3:1
- 100% tested up to 40 GHz
- Extremely Flexible
- Polarity indicators on cable ends



Applications

| | | |
|-------------------|------------------------------|---------------------------------|
| • General Purpose | • Laboratory Use | • Differential signals |
| • Laboratory Use | • Jitter measurements | • Physical Layer measurement |
| • General Purpose | • 28 Gbps and 32 Gbps SERDES | • Signal Integrity measurements |

Description

Pasternack's PE3CA2517-48 2.92mm male to 2.92mm male 48 inch cable using PE-P141LL 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-P141LL coax. The PE3CA2517-48 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. Pasternack's skew matched cable pair using PE-P141LL coax and 2.92mm male connections is part of our full line of RF components available for same-day shipping. These 2.92mm male to 2.92mm male delay matched cable pairs deliver low intrinsic skew to support jitter analysis, SERDES development and other signal integrity applications. Each 2.92mm skew matched pair of RF cable assemblies is 100% tested for delay match, insertion loss and VSWR. Each 2.92mm phase matched cable pair also includes a unique serial number and color-coded polarity indicators to simplify differential measurements.

Our 2.92mm male to 2.92mm male skew matched cable pair 48 Inch length using PE-P141LL coax, RoHS datasheet specifications and drawing with dimensions are shown below in this PDF. Whether the need is to provide superior signal integrity, higher data rates or phased matched cable systems, Pasternack has the right cable assemblies for the job.

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

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 Skew Matched Pair Cable 48 Inch Length Using PE-P141LL Coax PE3CA2517-48](#)



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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 | | 40 | GHz |
| VSWR | | | 1.3:1 | |
| Insertion Loss | | | -3.3 | dB |
| Velocity of Propagation | | 87 | | % |
| Capacitance | | 23.3 [76.44] | | pF/ft [pF/m] |
| Dielectric Withstanding Voltage (AC) | | | 500 | Vrms |
| Channel-to-Channel Delay Match | | | 2 | ps |

Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|------|------|------|----|----|-------|
| Frequency | 5 | 18 | 40 | | | GHz |
| Insertion Loss (Max.) | -1.1 | -2.1 | -3.3 | | | dB |

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

Length* 48 in [121.92 cm]

Cable

Cable Type PE-P141LL
 Impedance 50 Ohms
 Inner Conductor Type Solid
 Inner Conductor Material and Plating Copper
 Dielectric Type PE (F)
 Number of Shields 2
 Shield Layer 1 Aluminum Tape
 Shield Layer 2 Tinned Copper Braid
 Jacket Material PE, Black
 Jacket Diameter 0.24 in [6.1 mm]

One Time Minimum Bend Radius 0.75 in [19.05 mm]
 Repeated Minimum Bend Radius 2.5 in [63.5 mm]
 Bending Moment 0.25 lbs-ft [0.34 N-m]

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2.92mm Male to 2.92mm Male Skew Matched Pair
Cable 48 Inch Length Using PE-P141LL Coax

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Flat Plate Crush
Tensile Strength

20 lbs/in [0.36 Kg/mm]
80 lbs [36.29 Kg]

Connectors

| Description | Connector 1 | Connector 2 |
|-----------------------------------|----------------------------|----------------------------|
| Type | 2.92mm Male | 2.92mm Male |
| Impedance | 50 Ohms | 50 Ohms |
| Contact Material and Plating | Beryllium Copper, Gold | Beryllium Copper, Gold |
| Dielectric Type | PTFE | PTFE |
| Body Material and Plating | Passivated Stainless Steel | Passivated Stainless Steel |
| Coupling Nut Material and Plating | Passivated Stainless Steel | Passivated Stainless Steel |

Environmental Specifications

Temperature

Operating Range

-40 to +125 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:

PE3CA2517

- **xx**

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

Example: PE3CA2517-12 = 12 inches long cable
PE3CA2517-100cm = 100 cm long cable

2.92mm Male to 2.92mm Male Skew Matched Pair Cable 48 Inch Length Using PE-P141LL 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.

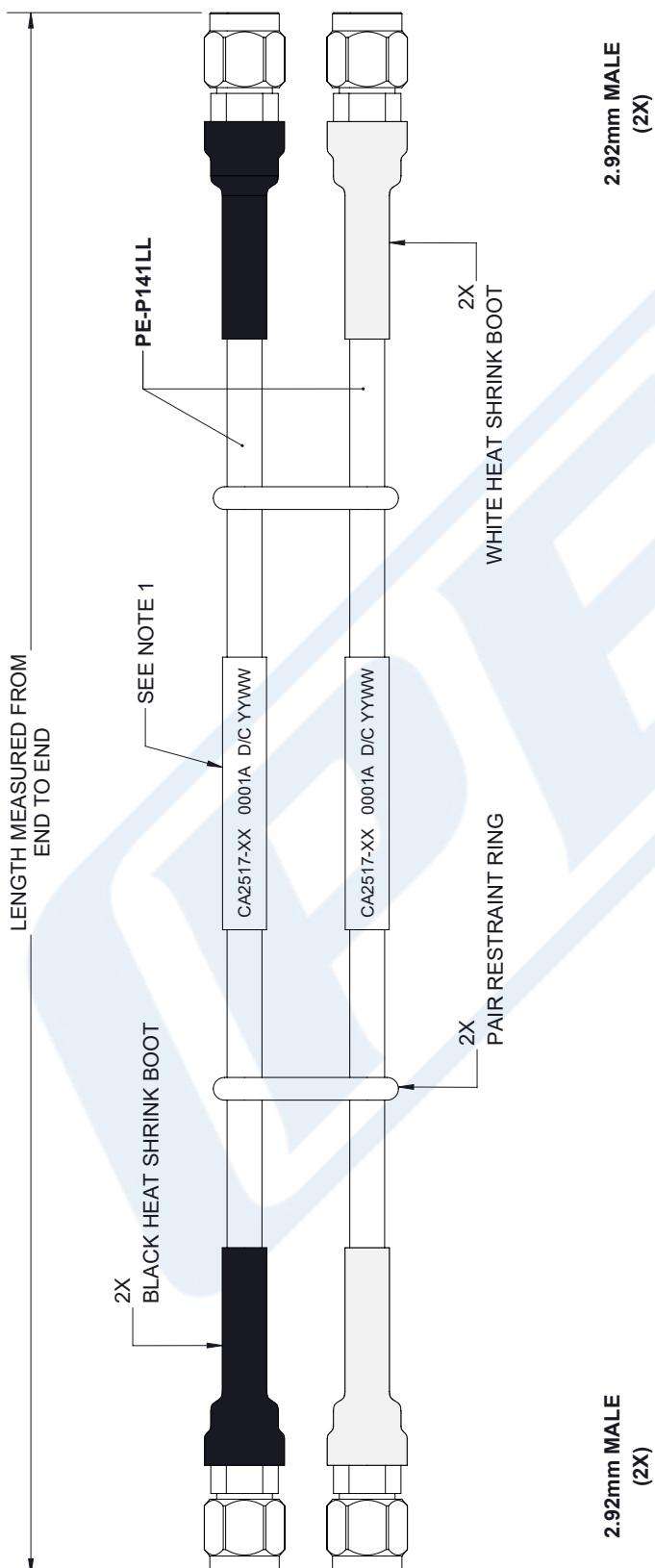
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URL: <https://www.pasternack.com/2.92mm-male-2.92mm-male-pe-p141ll-cable-assembly-pe3ca2517-48-p.aspx>

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PE3CA2517-48 CAD Drawing
 2.92mm Male to 2.92mm Male Skew Matched Pair Cable
 48 Inch Length Using PE-P141LL Coax

| REVISIONS | | | | |
|-----------|-----------------|-----------|------------|--|
| REV. | DESCRIPTION | DATE | APPROVED | |
| A | INITIAL RELEASE | 7/27/2021 | A. GANWANI | |



NOTES:

1. **MARKING TO INCLUDE :**
 - PART NUMBER AND LENGTH.
 - SERIAL NUMBER AND "A OR B" DESIGNATOR.
 - DATE CODE.
 -

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| Pasternack Enterprises, Inc. | | SHEET 1 OF 1 |
| P.O. Box 16759, Irvine, CA 92623. | | SCALE N/A |
| Phone: 1.949.261.1920 1.866.727.8376 | | ITEM NO. PE3CA2517 |
| Fax: 1.949.261.7451 | | REV A |
| Website: www.pasternack.com | | |
| E-mail: sales@pasternack.com | | |
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