



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

RF Cable Assemblies Technical Data Sheet

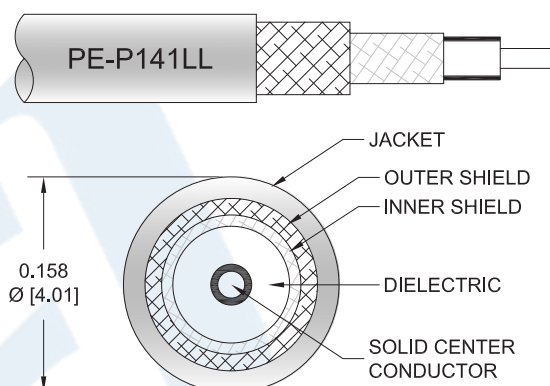
PE3CA2517

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

Description

Pasternack's PE3CA2517 2.92mm male to 2.92mm male 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 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 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 Using PE-P141LL Coax PE3CA2517](#)



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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			-1	dB/ft
			-3.28	dB/m
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

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

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]
Flat Plate Crush	20 lbs/in [0.36 Kg/mm]
Tensile Strength	80 lbs [36.29 Kg]

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

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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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PE3CA2517

How to Order

Part Number Configuration:

PE3CA2517

- **xx**

uu

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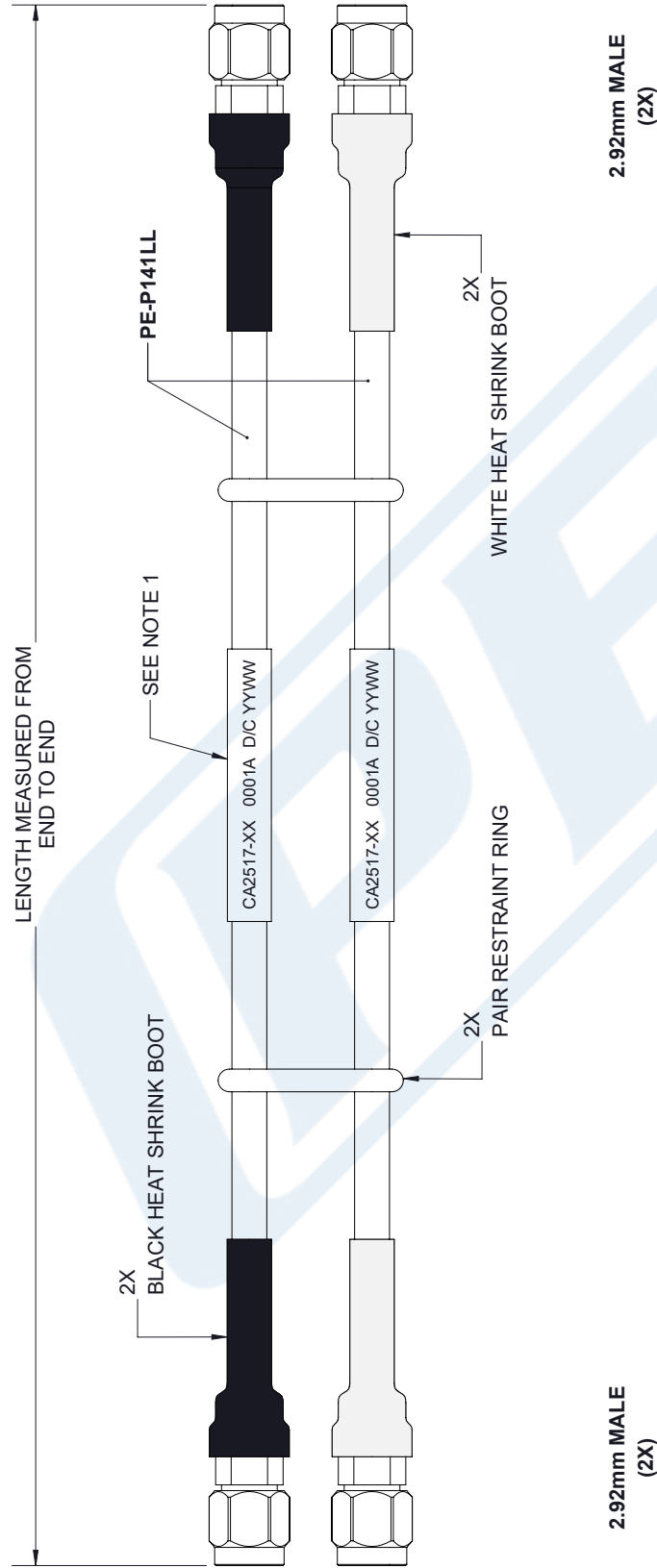
URL: <https://www.pasternack.com/2.92mm-male-2.92mm-male-pe-p141ll-cable-assembly-pe3ca2517-p.aspx>

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.

PE3CA2517 CAD Drawing

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

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



NOTES:

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

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS	
TOLERANCES:	FRACTIONS
.X = ± .2	[.08]
.XX = ± .02	[.51]
.XXX = ± .005	[.13]
CABLE LENGTH (L) TOLERANCES:	ANGLES ± 1°
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	
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.	

THIRD-ANGLE PROJECTION	
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SHEET 1	OF 1
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