



2.92mm Male to 2.92mm Male Cable Using PE-047SR Coax

RF Cable Assemblies Technical Data Sheet

PE3W10977

Configuration

- Connector 1: 2.92mm Male
- Connector 2: 2.92mm Male
- Cable Type: PE-047SR

Features

- Max Frequency 20 GHz
- 500 Mating Cycles

Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W10977 2.92mm male to 2.92mm male cable using PE-047SR coax is part of our full line of RF components available for same-day shipping. Pasternack's semi-rigid RF cable assemblies are ideal for high performance applications and can be formed, using proper tooling, to the routing pattern required. This Pasternack 2.92mm to 2.92mm cable assembly has a male to male gender configuration with 50 ohm semi-rigid PE-047SR coax. The PE3W10977 2.92mm male to 2.92mm male cable assembly operates to 20 GHz.

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		20	GHz
VSWR			1.4:1	
Dielectric Withstanding Voltage (AC)			500	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	1	2.5	5	10	20	GHz
Insertion Loss (Typ.)	0.4	0.55	0.8	1.3	1.9	dB/ft
	1.31	1.8	2.62	4.27	6.23	dB/m

Electrical Specification Notes:

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-047SR Coax PE3W10977](#)



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

Mechanical Specifications

Cable Assembly

Weight	0.016 lbs [7.26 g]
Cable	
Cable Type	PE-047SR
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Steel, Silver
Dielectric Type	PTFE
Number of Shields	1
Outer Conductor Material and Plating	Copper
Repeated Minimum Bend Radius	0.05 in [1.27 mm]

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 μ in minimum	50 μ in minimum
Dielectric Type	PEI	PEI
Body Material and Plating	Beryllium Copper, Gold over Nickel	Beryllium Copper, Gold over Nickel
Body Plating Specification	50 μ in minimum	50 μ in minimum
Coupling Nut Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Coupling Nut Plating Specification	ASTM-A582	ASTM-A582
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 +100 deg C

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

Plotted and Other Data

Notes:

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-047SR Coax PE3W10977](#)



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How to Order

Part Number Configuration:

PE3W10977

- **xx**

uu

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

Example: PE3W10977-12 = 12 inches long cable
PE3W10977-100cm = 100 cm long cable

2.92mm Male to 2.92mm Male Cable Using PE-047SR 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-047SR Coax PE3W10977](#)

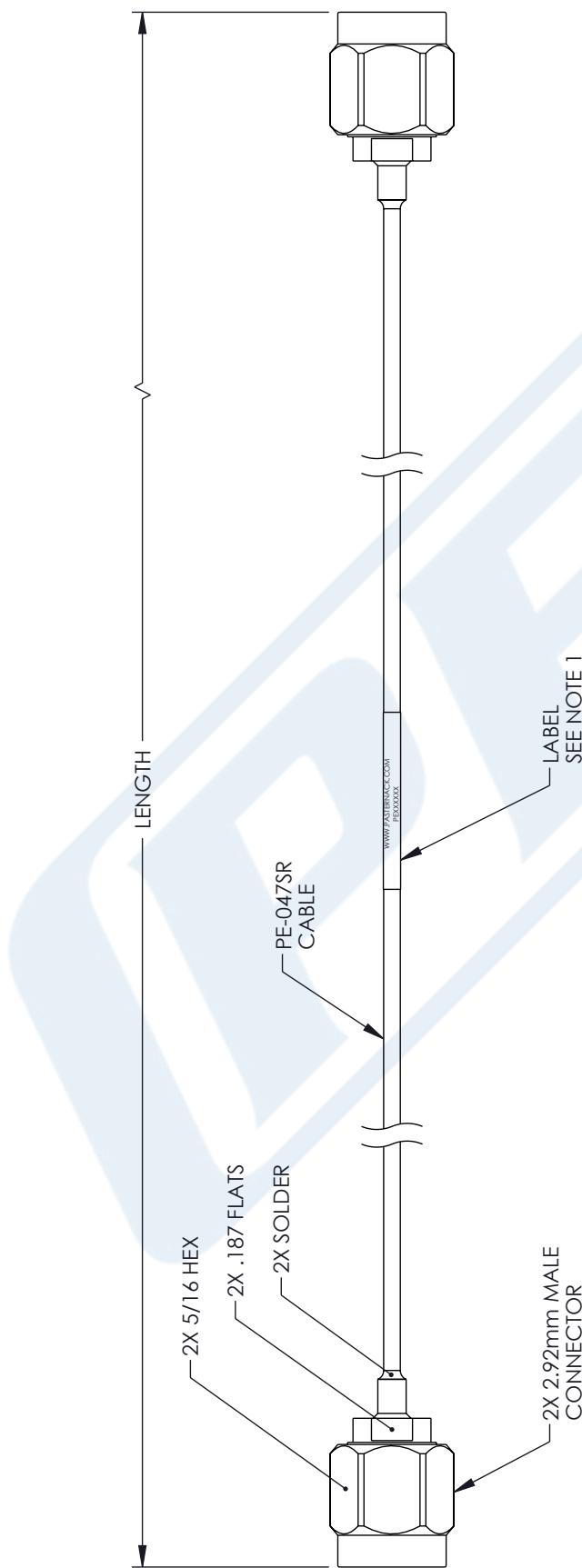
URL: <https://www.pasternack.com/2.92mm-male-to-2.92mm-male-cable-using-pe-047sr-pe3w10977-p.aspx>

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.

PE3W10977 CAD Drawing

2.92mm Male to 2.92mm Male Cable Using PE-047SR Coax

ZONE	REV.	DESCRIPTION	DATE	CHANGED BY	APPROVED BY
	A	INITIAL RELEASE	02/01/2023	SREITER	AGANWANI



NOTES:

1. CABLE ASSY LENGTH LABEL PLACEMENT: 36 INCH OR LESS, ONE LABEL APPROX CENTERED. LONGER THAN 36 INCH, TWO LABELS APPROX 6 INCHES FROM EACH CONNECTOR
2. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

UNLESS OTHERWISE SPECIFIED
LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:

$X = \pm 2$	[5]	<u>FRACTIONS</u>
$X = \pm 0.2$	[.5]	$\pm 1/32$

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DESCRIPTION		2.92mm MALE TO 2.92mm MALE CABLE USING PE-047SR COAX		
SIZE A	CAGE CODE 53919	DRAWN BY SREITER	ITEM NO. PE3W10977	REV A
Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920		NONE	1 OF 1	
TOLERANCES PER ASME Y14.5 SCALE SHEET				

CABLE LENGTH TOLERANCES:	
$X = \pm 2$	5'
$.00X = \pm 2$	5'
$.000X = \pm .005$	[.13]
FRACTIONS	
$X = \pm 2$	1/32
ANGLES $\pm 1^\circ$	

				INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y1.15 SHEET	
SCALE	NONE	1 OF 1			REV A
<p>DESCRIPTION</p> <p>2.92mm MALE TO 2.92mm MALE CABLE USING PE-047SR COAX</p>					
SIZE A	CAGE CODE 53919	DRAWN BY SREITER	ITEM NO. PE3W10977	REV A	
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UNLESS OTHERWISE SPECIFIED
LEADING DIMENSIONS ARE INCHES
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TOLERANCES:

$X = \pm 2$	[5]	FRACTIONS
$.00X = \pm .005$	[.5]	$\pm 1/32$
$XXX = \pm .005$	[13]	$\pm 1/16$

ANGLE TOLERANCES:

CABLE LENGTH TOLERANCES:

± 12 [350] = ± 12 [25] = ± 1 [5] -0

>12 [305] = 60 [1524] = $+2$ [45] 1/2 -0

>60 [1524] ± 120 [3048] = $+45$ [1012] -0

>12 [305] = 300 [7620] = $+6$ [152] -0

>300 [7620] = $+5$ % -0

**L DIMENSIONS ARE FOR REFERENCE ONLY
AND SUBJECT TO CHANGE WITHOUT NOTICE**