



MCX Plug Right Angle to MCX Plug Right Angle Low Loss Cable
Using LMR-100 Coax with HeatShrink and 180 Deg. Clock

TECHNICAL DATA SHEET

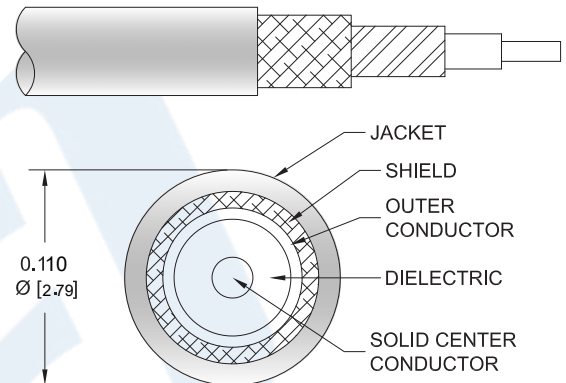
PE3C2942/SP

Configuration

- Connector 1: MCX Plug Right Angle
- Connector 2: MCX Plug Right Angle
- Cable Type: LMR-100A
- Coax Flex Type: Flexible

Features

- Max Frequency 3 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- PVC Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C2942/SP MCX plug right angle to MCX plug right angle cable using LMR-100 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 MCX to MCX cable assembly has a plug to plug gender configuration with 50 ohm flexible LMR-100A coax. The PE3C2942/SP MCX plug to MCX plug cable assembly operates to 3 GHz. The right angle MCX interfaces on the LMR-100A cable allow for easier connections in tight spaces. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 90 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: [MCX Plug Right Angle to MCX Plug Right Angle Low Loss Cable Using LMR-100 Coax with HeatShrink and 180 Deg. Clock PE3C2942/SP](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.4:1	
Velocity of Propagation		66		%
RF Shielding	90			dB
Group Delay		1.54 [5.05]		ns/ft [ns/m]
Capacitance		30.8 [101.05]		pF/ft [pF/m]
Inductance		0.077 [0.25]		uH/ft [uH/m]
DC Resistance Inner Conductor		81 [265.75]		Ω /1000ft [Ω /Km]
DC Resistance Outer Conductor		9.5 [31.17]		Ω /1000ft [Ω /Km]
Jacket Spark			2,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	100	250	500	1000	3000	MHz	
PE3C2942/SP	Custom Lengths Available	Insertion Loss (Typ.)	0.06	0.12	0.17	0.24	0.43	dB/ft	
			0.21	0.38	0.55	0.79	1.42	dB/m	
PE3C2942/SP-24	24 inch	Insertion Loss (Typ.)	0.53	0.63	0.73	0.88	1.27	dB	0.036
PE3C2942/SP-36	36 inch	Insertion Loss (Typ.)	0.6	0.75	0.9	1.12	1.7	dB	0.045
PE3C2942/SP-48	48 inch	Insertion Loss (Typ.)	0.66	0.86	1.06	1.36	2.13	dB	0.054
PE3C2942/SP-100CM	100 cm	Insertion Loss (Typ.)	0.61	0.78	0.95	1.19	1.82	dB	0.048
PE3C2942/SP-200CM	200 cm	Insertion Loss (Typ.)	0.82	1.16	1.49	1.98	3.24	dB	0.078

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1:	0.2 dB
Loss due to Connector 2:	0.2 dB
Base Weight:	0.027 pounds
Additional Weight per Inch:	0.00075 pounds

Mechanical Specifications

Cable Assembly

Weight 0.027 lbs [12.25 g]

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Cable

Cable Type	LMR-100A
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Steel
Dielectric Type	PE
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	PVC, Black
Jacket Diameter	0.11 in [2.79 mm]
One Time Minimum Bend Radius	0.25 in [6.35 mm]
Repeated Minimum Bend Radius	1 in [25.4 mm]
Bending Moment	0.1 lbs-ft [0.14 N-m]
Flat Plate Crush	10 lbs/in [0.18 Kg/mm]
Tensile Strength	15 lbs [6.8 Kg]

Connectors

Description	Connector 1	Connector 2
Type	MCX Plug Right Angle Push-On	MCX Plug Right Angle Push-On
Specification	CECC 22220	CECC 22220
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	30 µin minimum	30 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin minimum	100 µin minimum

Environmental Specifications

Temperature

Operating Range -40 to +60 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:

PE3C2942/SP

- xx

uu

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

Example: PE3C2942/SP-12 = 12 inches long cable
PE3C2942/SP-100cm = 100 cm long cable

MCX Plug Right Angle to MCX Plug Right Angle Low Loss Cable Using LMR-100 Coax with HeatShrink and 180 Deg. Clock 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: [MCX Plug Right Angle to MCX Plug Right Angle Low Loss Cable Using LMR-100 Coax with HeatShrink and 180 Deg. Clock PE3C2942/SP](https://www.pasternack.com/mcx-plug-right-angle-to-mcx-plug-right-angle-low-loss-cable-using-lmr-100-coax-with-heatshrink-and-180-deg-clock-pe3c2942-sp)

URL: <https://www.pasternack.com/mcx-plug-right-angle-to-mcx-plug-right-angle-low-loss-cable-using-lmr-100-coax-with-heatshrink-and-180-deg-clock-pe3c2942-sp>

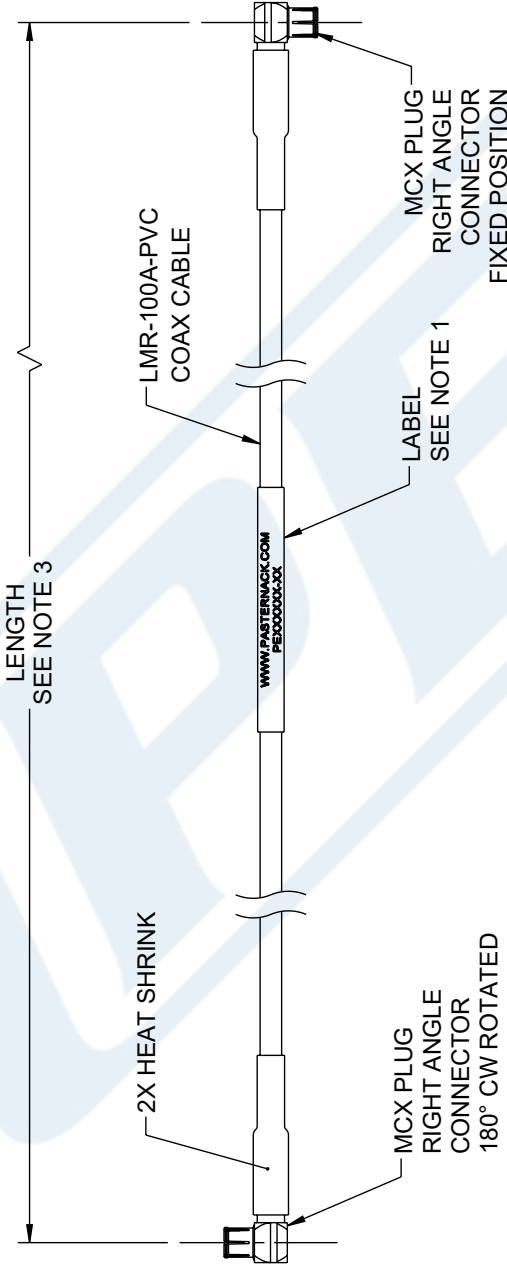
The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such 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.

PE3C2942/SP CAD Drawing

MCX Plug Right Angle to MCX Plug Right Angle Low Loss Cable Using
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ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	09/27/2023	HBAKKE	AGANWANI

REVISION	1	2	3	4	5	6



- NOTES:
- CABLE ASSEMBLY LENGTH LABEL PLACEMENT:
36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED.
LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
 - CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
 - CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

PE PASTERNAK
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Website: www.Pasternack.com
Phone: 1.866.727.8376 | 1.949.261.1920

DESCRIPTION
MCX PLUG RIGHT ANGLE TO MCX PLUG RIGHT ANGLE LOW LOSS CABLE USING LMR-100 COAX WITH HEATSHRINK AND 180 DEG. CLOCK

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

TOLERANCES:	FRACTIONS	ANGLES
.X = ±.2 [5]	± 1/32	± 1°
.XX = ±.02 [0.5]		
.XXX = ±.005 [0.13]		

CABLE LENGTH TOLERANCES:

<12 [305]	±.1 [2.5]	/-0
>12 [305] ≤ 60 [1524]	±.2 [5]	/-0
>60 [1524] ≤ 120 [3048]	±.4 [10]	/-0
>120 [3048] ≤ 300 [7620]	±.6 [15]	/-0
>300 [7620]	±.8 [20]	/-0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED. UNLESS OTHERWISE SPECIFIED, DIMENSIONS MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE

SHEET: 1 OF 1

CAGE CODE: A 53919

DRAWN BY: HBAKKE

ITEM NO.: PE3C2942/SP

REV: A