

Water Blue FAKRA Plug to MCX Plug Right Angle
Low Loss Cable Using LMR-100 Coax



RF Cable Assemblies Technical Data Sheet

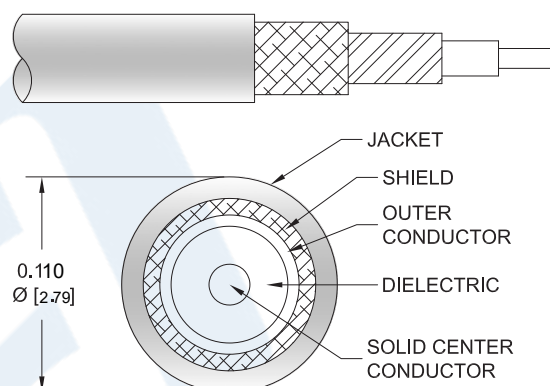
PE3C6824

Configuration

- Connector 1: FAKRA Plug
- Connector 2: MCX Plug Right Angle
- Cable Type: LMR-100A

Features

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



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C6824 water blue FAKRA plug 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 FAKRA to MCX cable assembly has a plug to plug gender configuration with 50 ohm flexible LMR-100A coax. The PE3C6824 FAKRA plug to MCX plug cable assembly operates to 3 GHz. The right angle MCX interface on the LMR-100A cable allows 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: [Water Blue FAKRA Plug to MCX Plug Right Angle Low Loss Cable Using LMR-100 Coax PE3C6824](#)



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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

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	3	GHz
Insertion Loss (Typ.)	0.07	0.115	0.165	0.24	0.434	dB/ft
	0.23	0.38	0.54	0.79	1.42	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB for the FAKRA plug connector and 0.2 dB for the MCX plug connector.

Mechanical Specifications

Cable Assembly

Weight 0.024 lbs [10.89 g]

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]

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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	FAKRA Plug	MCX Plug Right Angle
Specification		CECC 22220
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
Contact Material and Plating	Phosphor Bronze, Gold	Brass, Gold
Contact Plating Specification		30 µin minimum
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Brass, Nickel	
Body Material and Plating	Plastic	Brass, Nickel
Body Plating Specification		100 µin minimum

Environmental Specifications

Temperature

Operating Range	-40 to +60 deg C
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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: [Water Blue FAKRA Plug to MCX Plug Right Angle Low Loss Cable Using LMR-100 Coax PE3C6824](#)



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RF Cable Assemblies Technical Data Sheet

PE3C6824

How to Order

Part Number Configuration:

PE3C6824

- **xx**

uu

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

Example: PE3C6824-12 = 12 inches long cable
PE3C6824-100cm = 100 cm long cable

Water Blue FAKRA Plug to MCX Plug Right Angle Low Loss Cable Using LMR-100 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.

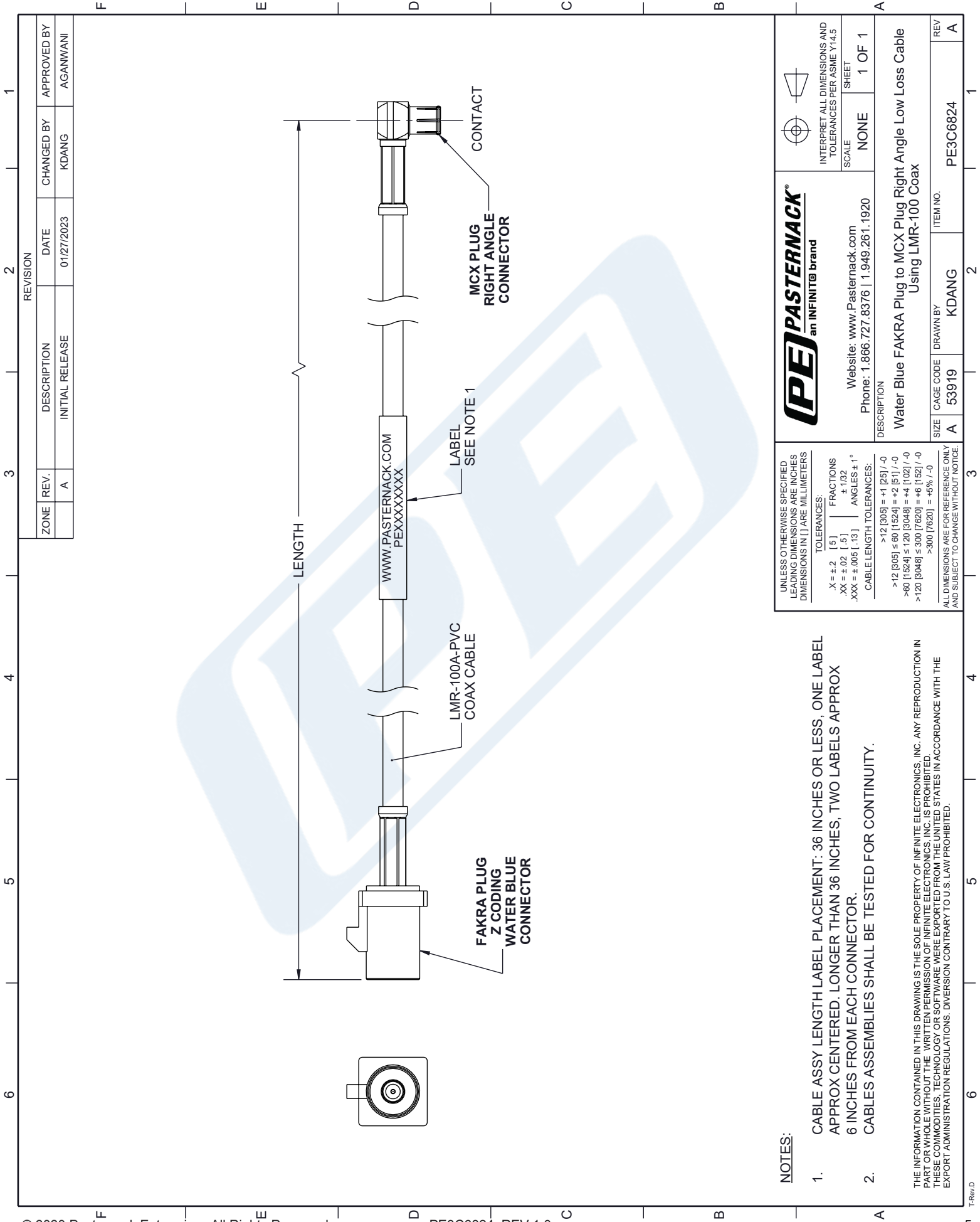
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Water Blue FAKRA Plug to MCX Plug Right Angle Low Loss Cable Using LMR-100 Coax PE3C6824](https://www.pasternack.com/fakra-plug-to-mcx-plug-right-angle-low-loss-cable-using-lmr-100-pe3c6824-p.aspx)

URL: <https://www.pasternack.com/fakra-plug-to-mcx-plug-right-angle-low-loss-cable-using-lmr-100-pe3c6824-p.aspx>

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PE3C6824 CAD Drawing

Water Blue FAKRA Plug to MCX Plug Right Angle Low Loss Cable Using LMR-100 Coax



NOTES:

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

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	SCALE	SHEET
NONE		1 OF 1
DESCRIPTION Water Blue FAKRA Plug to MCX Plug Right Angle Low Loss Cable Using LMR-100 Coax		
SIZE	CAGE CODE	ITEM NO.
A	53919	PE3C6824
DRAWN BY KDANG		REV A

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

TOLERANCES:

X = ±.2	[.5]	FRACTIONS
.XX = ±.02	[.5]	±.1/32
.XXX = ±.005	[.13]	ANGLES ± 1°

CABLE LENGTH TOLERANCES:

>12 [305]	= +1 [25] / -0
>60 [1524]	= +2 [51] / -0
>120 [3048]	= +4 [102] / -0
>300 [7620]	= +6 [152] / -0
>600 [15240]	= +8 [203] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY
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