



Black FAKRA Jack to FAKRA Plug Low Loss
Cable 50 CM Length Using LMR-100 Coax

RF Cable Assemblies Technical Data Sheet

PE3W08444-50CM

Configuration

- Connector 1: FAKRA Jack
- Connector 2: FAKRA Plug
- Cable Type: LMR-100A

Features

- Max Frequency 4 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- PVC Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W08444-50CM black FAKRA jack to FAKRA plug 50 cm 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 FAKRA cable assembly has a jack to plug gender configuration with 50 ohm flexible LMR-100A coax. The PE3W08444-50CM FAKRA jack to FAKRA plug cable assembly operates to 4 GHz. 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: [Black FAKRA Jack to FAKRA Plug Low Loss Cable 50 CM Length Using LMR-100 Coax PE3W08444-50CM](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		4	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	4	GHz
Insertion Loss (Typ.)	0.32	0.4	0.48	0.6	1.04	dB

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax cable used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

Length*	19.685 in [500 mm]
Diameter	0.37 in [9.4 mm]

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 Jack	FAKRA Plug
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Phosphor Bronze, Gold	Phosphor Bronze, Gold
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Brass, Nickel	Brass, Nickel
Body Material and Plating	Plastic	Plastic

Environmental Specifications

Temperature

Operating Range	-40 to +85 deg C
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Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

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How to Order

Part Number Configuration:

PE3W08444

- **xx**

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

Example: PE3W08444-12 = 12 inches long cable
PE3W08444-100cm = 100 cm long cable

Black FAKRA Jack to FAKRA Plug Low Loss Cable 50 CM Length 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: [Black FAKRA Jack to FAKRA Plug Low Loss Cable 50 CM Length Using LMR-100 Coax PE3W08444-50CM](https://www.pasternack.com/fakra-jack-fakra-plug-lmr100-cable-assembly-pe3w08444-50cm-p.aspx)

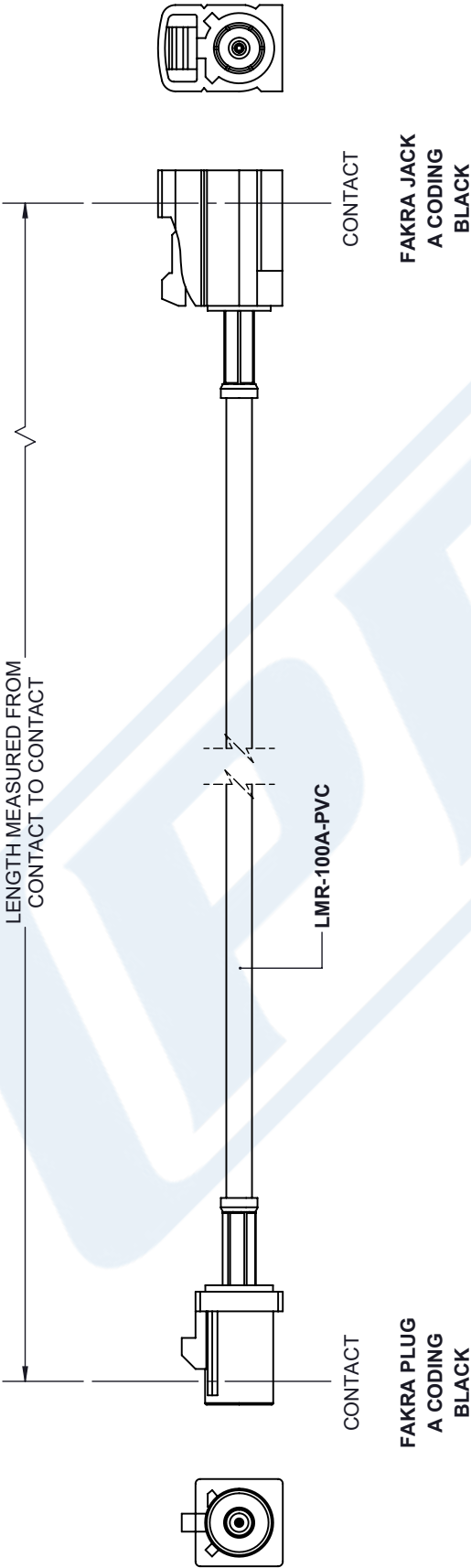
URL: <https://www.pasternack.com/fakra-jack-fakra-plug-lmr100-cable-assembly-pe3w08444-50cm-p.aspx>

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PE3W08444-50CM CAD Drawing

Black FAKRA Jack to FAKRA Plug Low Loss Cable 50 CM Length Using LMR-100 Coax

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	10/15/2020	S. ELLIS



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS				PE PASTERNAK® an INFINITE® brand Pasternack Enterprises, Inc. P.O.Box 16759, Irvine, CA 92623. Phone: 1.949.261.1920 1.866.727.8376 Fax: 1.949.261.7451 Website: www.pasternack.com E-mail: sales@pasternack.com				THIRD-ANGLE PROJECTION THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION ALL RIGHTS RESERVED. SHEET 1 OF 1 SCALE N/A				REV A	
SIZE A		CAGE CODE 53919		DRAWN BY K.DANG		ITEM NO. PE3W08444							
TOLERANCES:				ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.									
X = ± .2		[.008]		FRACTIONS									
.XX = ± .02		[.51]		± 1/32									
.XXX = ± .005		[.13]		ANGLES ± 1°									
CABLE LENGTH (L) TOLERANCES:													
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% L / -0									

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