



MCX Plug to Black FAKRA Jack Low Loss Cable 200 CM
Length Using LMR-100 Coax with HeatShrink

RF Cable Assemblies Technical Data Sheet

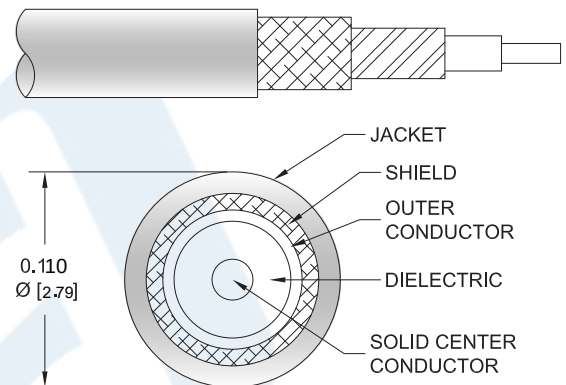
PE3C5654/HS-200CM

Configuration

- Connector 1: MCX Plug
- Connector 2: FAKRA Jack
- 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 PE3C5654/HS-200CM MCX plug to black FAKRA jack 200 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 MCX to FAKRA cable assembly has a plug to jack gender configuration with 50 ohm flexible LMR-100A coax. The PE3C5654/HS-200CM MCX plug to FAKRA jack cable assembly operates to 3 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: [MCX Plug to Black FAKRA Jack Low Loss Cable 200 CM Length Using LMR-100 Coax with HeatShrink PE3C5654/HS-200CM](#)



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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]
Operating Voltage (DC)			250	Vdc
Dielectric Withstanding Voltage (AC)			800	Vrms
Dielectric Withstanding Voltage (DC)			500	Vdc
Jacket Spark			2,000	Vrms
Input Power (Peak)			600	Watts

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	3	GHz
Insertion Loss (Typ.)	0.62	0.96	1.29	1.78	3.06	dB

Electrical Specification Notes:

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

Mechanical Specifications

Cable Assembly

Length*	78.74 in [200 cm]
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

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Shield Layer 1
Shield Layer 2
Jacket Material
Jacket Diameter

Aluminum Tape
Tinned Copper Braid
PVC, Black
0.11 in [2.79 mm]

One Time Minimum Bend Radius
Repeated Minimum Bend Radius
Bending Moment
Flat Plate Crush
Tensile Strength

0.25 in [6.35 mm]
1 in [25.4 mm]
0.1 lbs-ft [0.14 N-m]
10 lbs/in [0.18 Kg/mm]
15 lbs [6.8 Kg]

Connectors

Description	Connector 1	Connector 2
Type	MCX Plug	FAKRA Jack
Specification	CECC 22220	
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	Phosphor Bronze, Gold
Contact Plating Specification	30 µin minimum	
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Brass, Nickel
Body Material and Plating	Brass, Nickel	Plastic
Body Plating Specification	100 µin minimum	

Environmental Specifications

Temperature

Operating Range
Storage Range

-40 to +85 deg C
-70 to +85 deg C

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

Plotted and Other Data

Notes:

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PE3C5654/HS-200CM

How to Order

Part Number Configuration:

PE3C5654/HS

- xx

uu

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

Example: PE3C5654/HS-12 = 12 inches long cable
PE3C5654/HS-100cm = 100 cm long cable

MCX Plug to Black FAKRA Jack Low Loss Cable 200 CM Length Using LMR-100 Coax with HeatShrink 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/mcx-plug-fakra-jack-lmr100-cable-assembly-pe3c5654-hs-200cm-p.aspx>

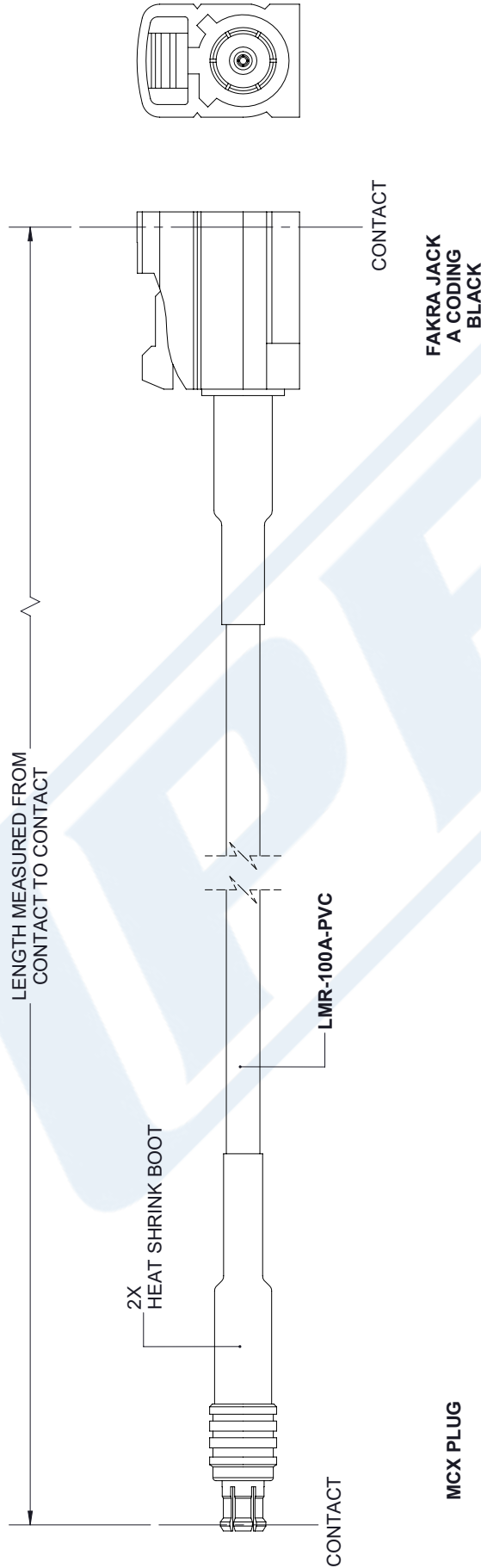
The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such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

PE3C5654/HS-200CM CAD Drawing

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	4/13/2021	SELLIS



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

TOLERANCES:

.X = ± .2	[.08]	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

ALL DIMENSIONS SHOWN
ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

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SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	K.DANG	PE3C5654/HS

REV A

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