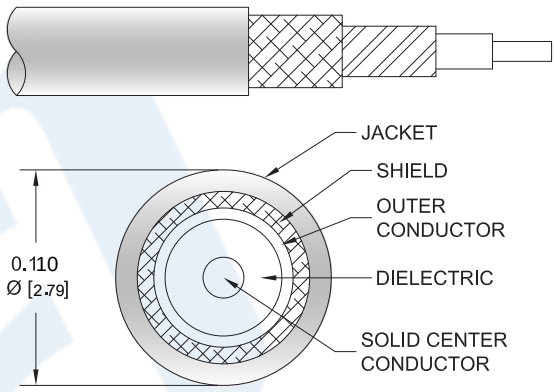
PASTERNACK
an INFINITE brand

MCX Plug to Black FAKRA Jack Cable Using LMR-100 Coax with HeatShrink

RF Cable Assemblies Technical Data Sheet PE3C5654/HS

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 MCX plug to black FAKRA jack 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 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 Cable Using LMR-100 Coax with HeatShrink PE3C5654/HS

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

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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.)	0.06	0.11	0.16	0.24	0.43	dB/ft
	0.2	0.36	0.52	0.79	1.41	dB/m

Electrical Specification Notes:
Insertion Loss does not include the loss of the connectors. The Insertion Loss includes an estimated insertion loss of 0.1dB per connector loss.

Mechanical Specifications

Cable Assembly

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	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	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	-40 to +85 deg C
Storage Range	-70 to +85 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: **PE3C5654/HS - xx uu**

- uu — Unit of Measure:
  - cm = Centimeters
  - <blank> = Inches
- xx — Length
- PE3C5654/HS — Base Number

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

MCX Plug to Black FAKRA Jack Cable 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.

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 Cable Using LMR-100 Coax with HeatShrink PE3C5654/HS

URL: https://www.pasternack.com/mcx-plug-fakra-jack-lmr100-cable-assembly-pe3c5654-hs-p.aspx

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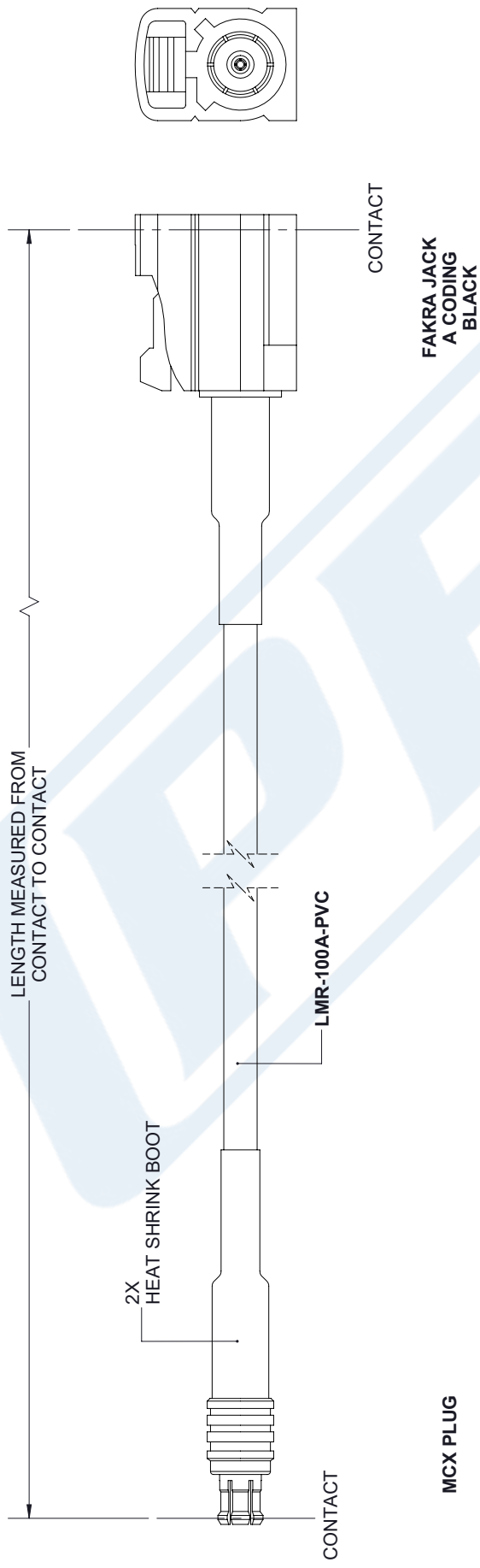
PE3C5654/HS CAD Drawing

MCX Plug to Black FAKRA Jack Cable Using LMR-100 Coax with HeatShrink



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

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

TOLERANCES:

.X = ± .2	[5.08]	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.

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

THIRD-ANGLE PROJECTION

SHEET	OF	
1	1	

SCALE N/A

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T-Rev.D