



MCX Plug Right Angle to SMA Male Right Angle Cable
50 cm Length Using RG174 Coax with HeatShrink

RF Cable Assemblies Technical Data Sheet

PE33831/HS-50CM

Configuration

- Connector 1: MCX Plug Right Angle
- Connector 2: SMA Male Right Angle
- Cable Type: RG174

Features

- Max Frequency 1 GHz
- 66% Phase Velocity
- PVC Jacket

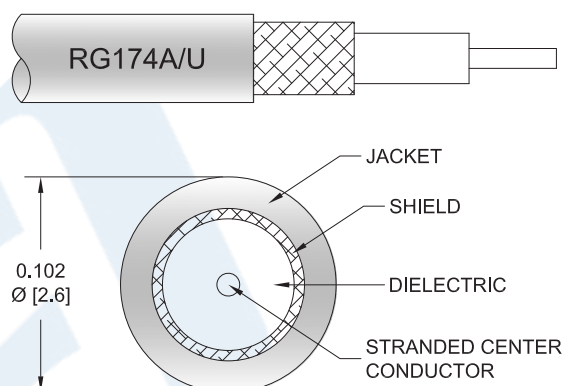
Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE33831/HS-50CM MCX plug right angle to SMA male right angle 50 cm cable using RG174 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 SMA cable assembly has a plug to male gender configuration with 50 ohm flexible RG174 coax. The PE33831/HS-50CM MCX plug to SMA male cable assembly operates to 1 GHz. The right angle MCX and right angle SMA interfaces on the RG174 cable allow for easier connections in tight spaces.

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 SMA Male Right Angle Cable 50 cm Length Using RG174 Coax with HeatShrink PE33831/HS-50CM](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		1,000	MHz
VSWR			1.45:1	
Velocity of Propagation		66		%
Capacitance		31.08 [101.97]		pF/ft [pF/m]

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	100	250	500	1,000		MHz
Insertion Loss (Max.)	0.54	0.62	0.75	0.92		dB

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax used in this assembly. Insertion Loss is estimated as 0.2 dB per connector.

Mechanical Specifications

Cable Assembly

Length*	19.68 in [499.87 mm]
Diameter	0.315 in [8 mm]

Cable

Cable Type	RG174
Impedance	50 Ohms
Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper Clad Steel
Dielectric Type	PE
Number of Shields	1
Shield Layer 1	Tinned Copper Braid
Jacket Material	PVC, Black
Jacket Diameter	0.11 in [2.79 mm]

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Connectors

Description	Connector 1	Connector 2
Type	MCX Plug Right Angle	SMA Male Right Angle
Specification	CECC 22220	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	30 µin minimum	50 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin minimum	100 µin minimum
Coupling Nut Material and Plating		Brass, Nickel
Coupling Nut Plating Specification		100 µin minimum
Hex Size		5/16 inch
Torque		3 in-lbs [0.34 Nm]

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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PE33831/HS-50CM

How to Order

Part Number Configuration:

PE33831/HS - xx

uu

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

Example: PE33831/HS-12 = 12 inches long cable
PE33831/HS-100cm = 100 cm long cable

MCX Plug Right Angle to SMA Male Right Angle Cable 50 cm Length Using RG174 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.

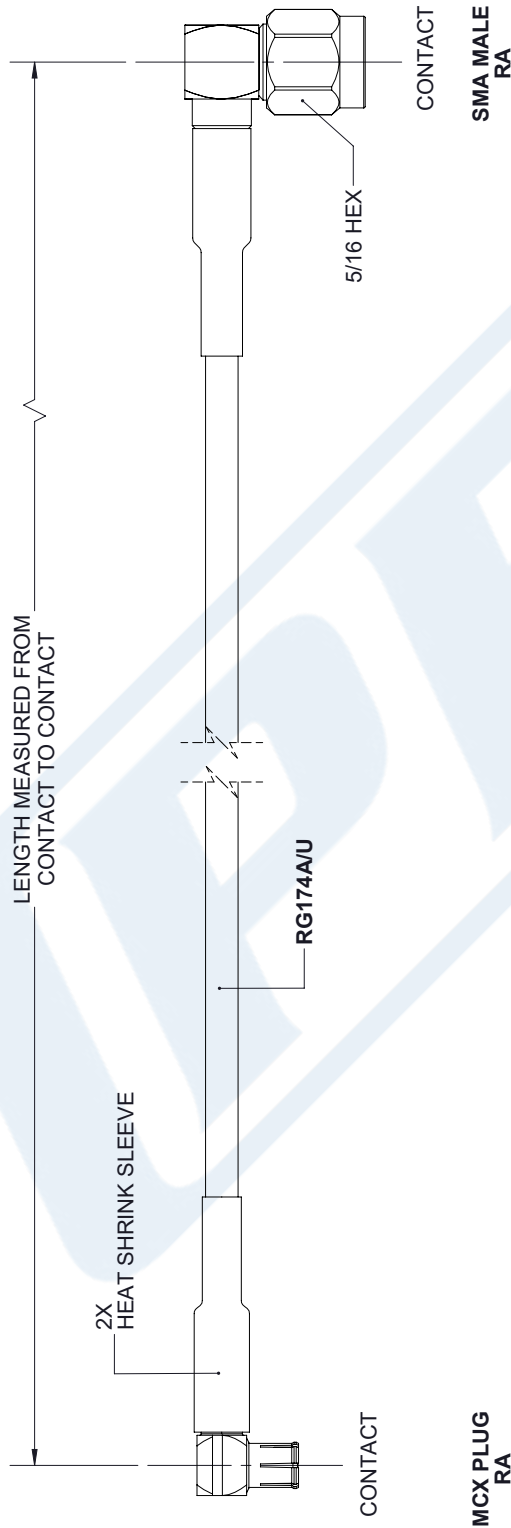
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URL:

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.

PE33831/HS-50CM CAD Drawing MCX Plug Right Angle to SMA Male Right Angle Cable 50 cm Length Using RG174 Coax with HeatShrink

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	8/24/2020	S.ELLIS



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS	
TOLERANCES:	
.X = ± .2	[.08]
.XX = ± .02	[.51]
.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.
A	53919	K.DANG	PE33831/HS

THIRD-ANGLE PROJECTION	
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SHEET	1 OF 1
SCALE	N/A
REV	A