



SMA Male to QMA Male Low Loss Cable
50 cm Length Using LMR-100 Coax

RF Cable Assemblies Technical Data Sheet

PE3W09880-50CM

Configuration

- Connector 1: SMA Male
- Connector 2: QMA Male
- Cable Type: LMR-100A

Features

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- PVC Jacket

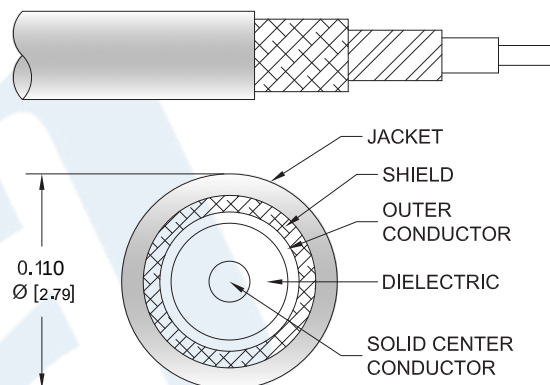
Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W09880-50CM SMA male to QMA male 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 SMA to QMA cable assembly has a male to male gender configuration with 50 ohm flexible LMR-100A coax. The PE3W09880-50CM SMA male to QMA male cable assembly operates to 5.8 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: [SMA Male to QMA Male Low Loss Cable 50 cm Length Using LMR-100 Coax PE3W09880-50CM](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
VSWR			1.45:1	
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	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.4	0.48	0.59	0.86	1.25	dB

Electrical Specification Notes:

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

Mechanical Specifications

Cable Assembly

Length* 19.68 in [499.87 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]

One Time Minimum Bend Radius 0.25 in [6.35 mm]

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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	SMA Male	QMA Male
Impedance	50 Ohms	50 Ohms
Mating Cycles		100
Contact Material and Plating	Brass, Gold	Brass, Gold
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Phosphor Bronze, Tri-Metal
Body Material and Plating	Brass, Gold	Brass, Tri-Metal
Coupling Nut Material and Plating	Brass, Gold	
Hex Size	5/16 in	
Torque	5 in-lbs [0.57 Nm]	

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

Plotted and Other Data

Notes:

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PE3W09880-50CM

How to Order

Part Number Configuration:

PE3W09880

- **xx**

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

Example: PE3W09880-12 = 12 inches long cable
PE3W09880-100cm = 100 cm long cable

SMA Male to QMA Male 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.

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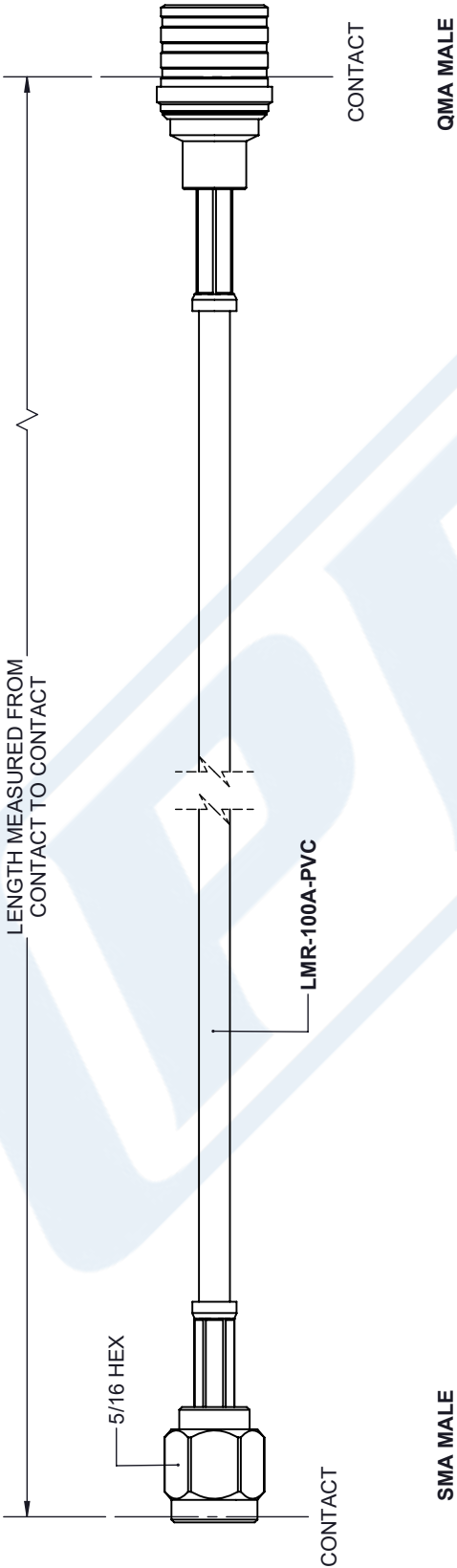
URL: <https://www.pasternack.com/sma-male-qma-male-lmr100-cable-assembly-pe3w09880-50cm-p.aspx>

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.

PE3W09880-50CM CAD Drawing

SMA Male to QMA Male 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

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.

PE PASTERNAK
an INFINITE brand

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SHEET 1 OF 1

SCALE N/A

SIZE A	CAGE CODE 53919	DRAWN BY K.DANG	ITEM NO. PE3W09880	REV A
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