



## SMA Male to SMA Female Low Loss Cable Using LMR-100 Coax

### RF Cable Assemblies Technical Data Sheet

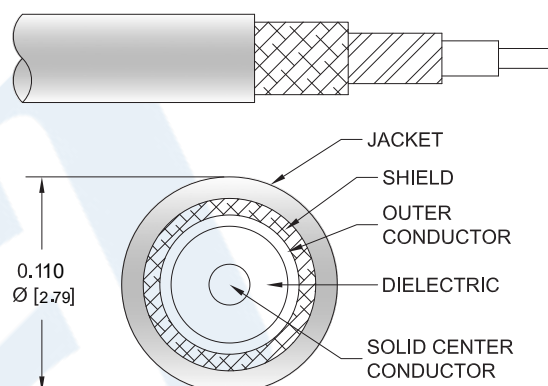
**PE3W09741**

#### Configuration

- Connector 1: SMA Male
- Connector 2: SMA Female
- 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 PE3W09741 SMA male to SMA female 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 SMA cable assembly has a male to female gender configuration with 50 ohm flexible LMR-100A coax. The PE3W09741 SMA male to SMA female 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 SMA Female Low Loss Cable Using LMR-100 Coax PE3W09741](#)



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#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
VSWR			1.5:1	
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.)	0.12	0.17	0.24	0.4	0.64	dB/ft
	0.39	0.56	0.79	1.31	2.1	dB/m

#### Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB for the Female connector and  $0.1 \times \sqrt{F(\text{GHz})}$  for the Male connector.

#### Mechanical Specifications

##### Cable Assembly

Weight 0.026 lbs [11.79 g]

##### 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	SMA Male	SMA Female
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	200 $\mu$ in. minimum	
Coupling Nut Material and Plating	Brass, Nickel	

#### Environmental Specifications

##### Temperature

Operating Range	-65 to +165 deg C
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#### Compliance Certifications (see [product page](#) for current document)

#### Plotted and Other Data

Notes:

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## SMA Male to SMA Female Low Loss Cable Using LMR-100 Coax

### RF Cable Assemblies Technical Data Sheet

**PE3W09741**

#### How to Order

Part Number Configuration:

**PE3W09741**

- **xx**

**uu**

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

Example: PE3W09741-12 = 12 inches long cable  
PE3W09741-100cm = 100 cm long cable

SMA Male to SMA Female Low Loss Cable 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: [SMA Male to SMA Female Low Loss Cable Using LMR-100 Coax PE3W09741](#)

URL: <https://www.pasternack.com/sma-male-to-sma-female-low-loss-cable-using-lmr-100-pe3w09741-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.

PE3W09741 CAD Drawing  
SMA Male to SMA Female Low Loss Cable Using LMR-100 Coax

