



SMA Male to SSMC Plug Low Loss Cable Using LMR-100 Coax

RF Cable Assemblies Technical Data Sheet

PE3C4422

Configuration

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

Features

- SSMC Cable Assembly Max. Operating Frequency of 3 GHz
- Small SSMC cable connection form factor (50% smaller than SMA, radially)
- Reliable threaded coupling
- In stock and ready to ship

Applications

- SSMC Cable General Purpose Test
- Data Acquisition Systems
- A/D Conversion Systems
- Ultra Wideband Digital Receivers
- Software defined radio (SDR)

Description

Pasternack's SSMC cable assemblies are part of our full line of RF components available for same-day shipping. These SSMC cable assemblies are designed to connect SSMC system components and test connections, delivering signal frequencies as high as 12.4 GHz. Our family of SSMC cables can also be used to connect SSMC ports on data acquisition systems, A/D modules or SSMC coax patch panels. If none of our standard options fit your application, you can specify your own custom SSMC cable assembly using Pasternack's online Cable Creator.

Our SSMC cable assembly datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave cable assemblies allow designers to configure and customize their signal connections however they like. Whether the need is to provide SSMC cabling for a data acquisition system, or simply create a custom cable assembly configuration, Pasternack has the right cable assemblies for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same day.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	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]

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 SSMC Plug Low Loss Cable Using LMR-100 Coax PE3C4422](#)



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Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	3	GHz
Insertion Loss (Typ.)						dB/m
	0.12	0.17	0.24	0.4	0.44	dB/ft
	0.39	0.56	0.79	1.31	1.44	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

Diameter 0.315 in [8 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]
 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]

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Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SSMC Plug
Specification	MIL-STD-348A	
Impedance	50 Ohms	50 Ohms
Mating Cycles		500
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Specification	30 µin minimum	MIL-G-45204
Dielectric Type	PTFE	Teflon
Body Material and Plating	Brass, Nickel	Beryllium Copper, Gold
Body Plating Specification	100 µin minimum	MIL-G-45204
Coupling Nut Material and Plating	Brass, Nickel	Beryllium Copper, Gold
Coupling Nut Plating Specification	100 µin minimum	MIL-G-45206
Hex Size	5/16 inch	
Torque	3 in-lbs [0.34 Nm]	1.75 in-lbs [0.2 Nm]

Mechanical Specification Notes:

*All cable assemblies have a length tolerance of 1.5% or $\pm 3/8"$, whichever is greater.

Environmental Specifications

Temperature

Operating Range

-40 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:

PE3C4422

- **xx**

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

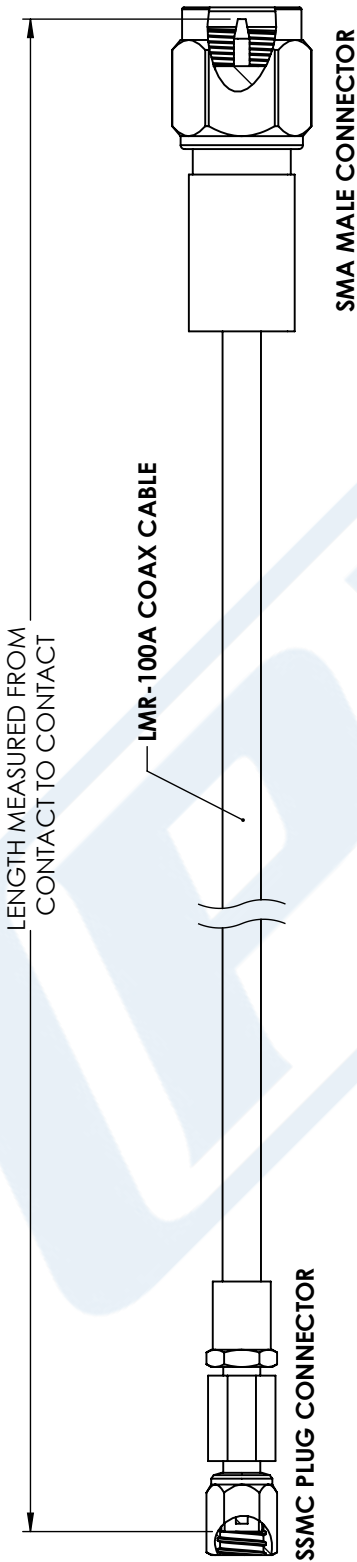
Example: PE3C4422-12 = 12 inches long cable
PE3C4422-100cm = 100 cm long cable

SMA Male to SSMC Plug 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 SSMC Plug Low Loss Cable Using LMR-100 Coax PE3C4422](https://www.pasternack.com/sma-male-ssmc-plug-lmr100-cable-assembly-pe3c4422-p.aspx)

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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.



STANDARD TOLERANCES	
.X	±0.2
.XX	±0.01
.XXX	±0.005

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

PE

PASTERNACK®

THE ENGINEER'S RF SOURCE

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DWG TITLE	
PE3C4422	
CAGE CODE	53919

NOTES: 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL. 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME. 3. DIMENSIONS ARE IN INCHES [mm].			
CAD FILE	09/13/17	SCALE	N/A
SIZE	A	CN2245	