



## RF Cable Assemblies Technical Data Sheet

PE3C4422

# Configuration

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

## **Features**

- Max Frequency 3 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- PVC Jacket
- Small SSMC cable connection form factor (50% smaller than SMA, radially)
- · Reliable threaded coupling
- · In stock and ready to ship

# JACKET SHIELD OUTER CONDUCTOR DIELECTRIC SOLID CENTER CONDUCTOR

# **Applications**

- · General Purpose
- Laboratory Use

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

## Description

Pasternack's PE3C4422 SMA male to SSMC plug 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 SSMC cable assembly has a male to plug gender configuration with 50 ohm flexible LMR-100A coax. The PE3C4422 SMA male to SSMC plug 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: SMA Male to SSMC Plug Low Loss Cable Using LMR-100 Coax PE3C4422

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





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## **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR		, iii	1.5:1	
Velocity of Propagation		66		%
RF Shielding	90	A = A		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]

Specifications by	Frequency
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Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	3	GHz
Insertion Loss (Typ.)	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 Pl Number of Shields 2

Shield Layer 1 Aluminum Tape
Shield Layer 2 Tinned Copper Braid
Jacket Material PVC, Black

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]

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Bending Moment Flat Plate Crush Tensile Strength 0.1 lbs-ft [0.14 N-m] 10 lbs/in [0.18 Kg/mm] 15 lbs [6.8 Kg]

## **Connectors**

Description	Connector 1	Connector 2 SSMC Plug	
Туре	SMA Male		
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]	

# **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**



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

URL: https://www.pasternack.com/sma-male-ssmc-plug-lmr100-cable-assembly-pe3c4422-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.

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