# SSMC Plug to SSMC Plug Low Loss Cable 12 Inch Length Using LMR-100 Coax

## RF Cable Assemblies Technical Data Sheet                    PE3C4419-12

### Configuration
- Connector 1: SSMC Plug
- Connector 2: SSMC Plug
- Cable Type: LMR-100A

### Features
- SSMC Cable Assembly Max. Operating Frequency of 5800 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 | | 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] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: SSMC Plug to SSMC Plug Low Loss Cable 12 Inch Length Using LMR-100 Coax PE3C4419-12

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### Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|---|---|---|---|---|---|---|
| Frequency | 0.25 | 0.5 | 1 | 2.5 | 5.8 | GHz |
| Insertion Loss (Typ.) | 0.32 | 0.37 | 0.44 | 0.6 | 0.85 | dB |

### Mechanical Specifications

**Cable Assembly**
Length*                                    12 in [304.8 mm]
Diameter                                   0.156 in [3.96 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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## SSMC Plug to SSMC Plug Low Loss Cable
## 12 Inch Length Using LMR-100 Coax

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**Connectors**

| Description | Connector 1 | Connector 2 |
|---|---|---|
| Type | SSMC Plug | SSMC Plug |
| Impedance | 50 Ohms | 50 Ohms |
| Mating Cycles | 500 | 500 |
| Contact Material and Plating | Beryllium Copper, Gold | Beryllium Copper, Gold |
| Contact Plating Specification | MIL-G-45204 | MIL-G-45204 |
| Dielectric Type | Teflon | Teflon |
| Body Material and Plating | Beryllium Copper, Gold | Beryllium Copper, Gold |
| Body Plating Specification | MIL-G-45204 | MIL-G-45204 |
| Coupling Nut Material and Plating | Beryllium Copper, Gold | Beryllium Copper, Gold |
| Coupling Nut Plating Specification | MIL-G-45206 | MIL-G-45206 |
| Torque | 1.75 in-lbs [0.2 Nm] | 1.75 in-lbs [0.2 Nm] |

Mechanical Specification Notes:
*All cable assemblies have a length tolerance of 1.5% or ± 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:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: SSMC Plug to SSMC Plug Low Loss Cable 12 Inch Length Using LMR-100 Coax PE3C4419-12

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### How to Order

Part Number Configuration:        **PE3C4419**     **- xx**     **uu**

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

Example:    PE3C4419-12 = 12 inches long cable
PE3C4419-100cm = 100 cm long cable

SSMC Plug to SSMC Plug Low Loss Cable 12 Inch 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: SSMC Plug to SSMC Plug Low Loss Cable 12 Inch Length Using LMR-100 Coax PE3C4419-12
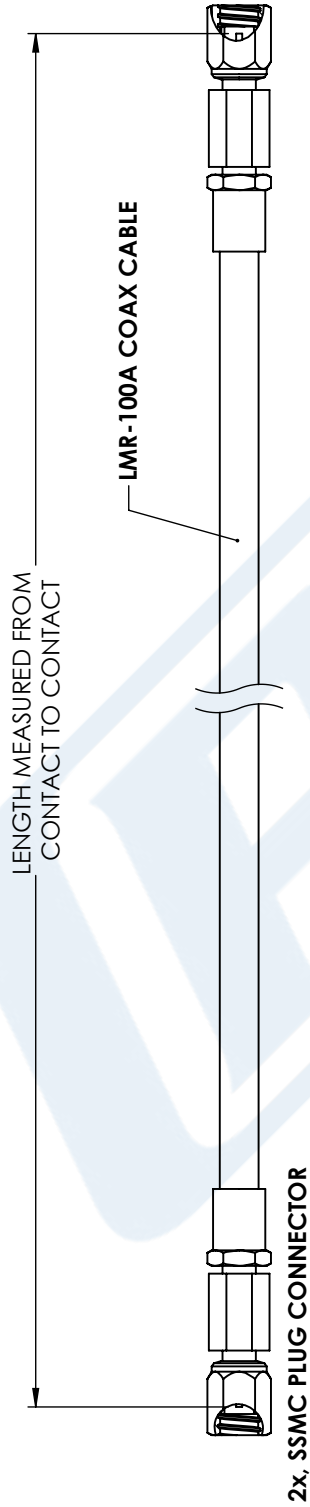
URL: https://www.pasternack.com/ssmc-plug-ssmc-plug-lmr100-cable-assembly-pe3c4419-12-p.aspx

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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LENGTH MEASURED FROM CONTACT TO CONTACT

LMR-100A COAX CABLE

2x, SSMC PLUG CONNECTOR

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

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

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 | 09/04/17 | SCALE N/A | SIZE A |

CN2245

DWG TITLE
PE3C4419

CAGE CODE 53919

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