



SSMC Plug to SSMC Plug Low Loss Cable 18 Inch Length Using LMR-100 Coax

RF Cable Assemblies Technical Data Sheet

ET32827

Configuration

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

Features

- SSMC Cable Assembly Max. Operating Frequency of 5.8 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] |



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| | | | | | | Units |
|-----------------------|------|------|------|-----|------|-------|
| Frequency | 0.25 | 0.5 | 1 | 2.5 | 5.8 | GHz |
| Insertion Loss (Typ.) | 0.38 | 0.46 | 0.56 | 0.8 | 1.17 | dB |

Mechanical Specifications

Cable Assembly

Length* 18 in [457.2 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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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 $\pm 3/8$ ", whichever is greater.

Environmental Specifications

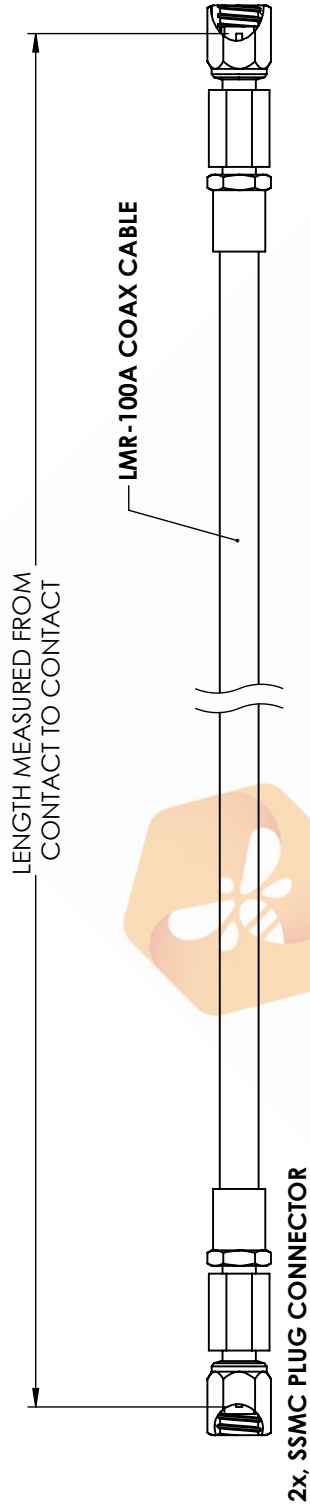
Temperature

Operating Range

-40 to +85 deg C

ET32827 CAD Drawing

SSMC Plug to SSMC Plug Low Loss Cable 18 Inch Length Using LMR-100 Coax



STANDARD TOLERANCES

- .X ±0.2
- .XX ±0.01
- .XXX ±0.005

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES



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DWG TITLE

ET32827

CAGE CODE 53919

CAD FILE 09/04/17

SCALE N/A

SIZE A

CN2245

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].