



## SSMC Plug to SSMC Plug Low Loss Cable 36 Inch Length Using LMR-100 Coax

### RF Cable Assemblies Technical Data Sheet

**ET32829**

#### 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]		$\Omega$ /1000ft [ $\Omega$ /Km]
DC Resistance Outer Conductor		9.5 [31.17]		$\Omega$ /1000ft [ $\Omega$ /Km]



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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.)	0.56	0.71	0.92	1.4	2.13	dB

**Mechanical Specifications**

**Cable Assembly**

Length\* 36 in [914.4 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**

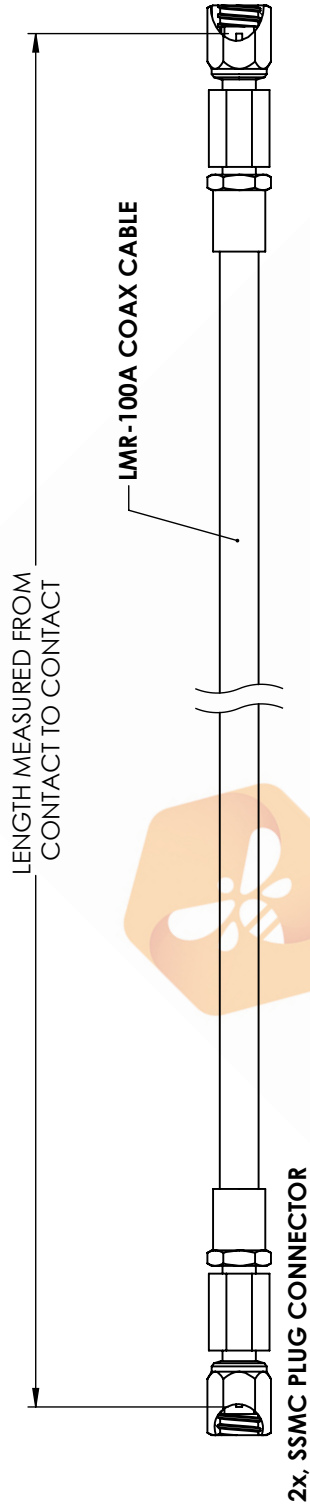
**Temperature**

Operating Range

-40 to +85 deg C

# ET32829 CAD Drawing

SSMC Plug to SSMC Plug Low Loss Cable 36 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

ET32829

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 09/04/17

SCALE N/A

SIZE A

CN2245