

RF Cable Assemblies Technical Data Sheet

Configuration

- Connector 1: SMA Male Right Angle
- Connector 2: SSMC Plug Right Angle
- 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 Right Angle to SSMC Plug Right Angle Low Loss Cable Using LMR-100 Coax PE3C4425

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

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NAC







PE3C4425

Jacket Spark 2.000 Vrms **Specifications by Frequency** Description **F1 F2** F3 **F4** F5 Units 0.25 0.5 1 2.5 Frequency 3 GHz dB/m 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

Cable

Cable Type Impedance Inner Conductor Type Inner Conductor Material and Plating Dielectric Type Number of Shields Shield Layer 1 Shield Layer 2 Jacket Material Jacket Diameter

One Time Minimum Bend Radius Repeated Minimum Bend Radius Bending Moment Flat Plate Crush Tensile Strength 0.315 in [8 mm]

LMR-100A 50 Ohms Solid Copper Clad Steel PE 2 Aluminum Tape Tinned Copper Braid PVC, Black 0.11 in [2.79 mm]

0.25 in [6.35 mm] 1 in [25.4 mm] 0.1 lbs-ft [0.14 N-m] 10 lbs/in [0.18 Kg/mm] 15 lbs [6.8 Kg]

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Connectors

Description	Connector 1	Connector 2 SSMC Plug Right Angle	
Туре	SMA Male Right Angle		
Specification	MIL-STD-348A		
Impedance	50 Ohms	50 Ohms	
Mating Cycles		500	
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold	
Contact Plating Specification	50 µin minimum	MIL-G-45204	
Dielectric Type	PTFE	Teflon	
Body Material and Plating	Brass, Nickel	Brass, 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-45204	
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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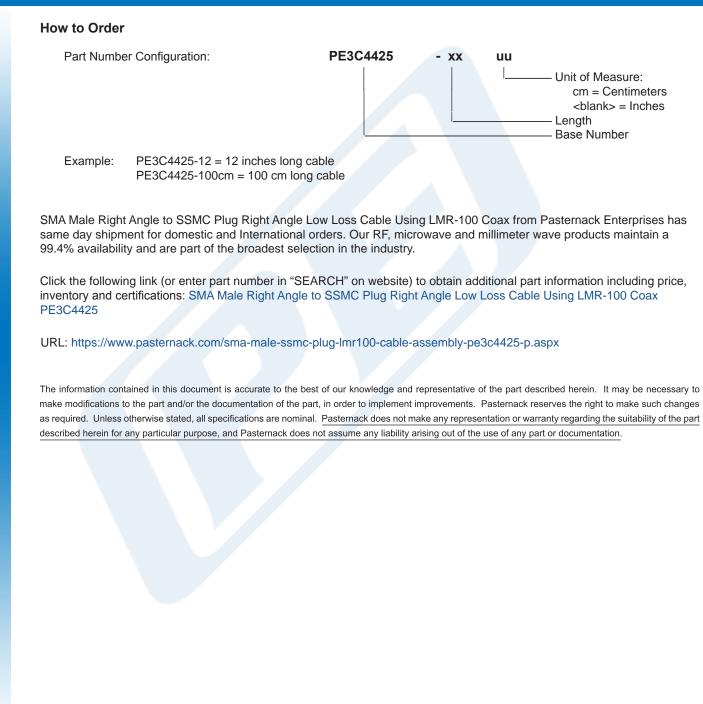






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PE3C4425 CAD Drawing SMA Male Right Angle to SSMC Plug Right Angle Low Loss Cable Using LMR-100 Coax

