

# **RF Cable Assemblies Technical Data Sheet**

### Configuration

- Connector 1: SSMC Plug Right Angle
- Connector 2: SSMC Plug Right Angle
- 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			1.6:1	
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 Right Angle to SSMC Plug Right Angle Low Loss Cable 24 Inch Length Using LMR-100 Coax PE3C4421-24

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



PE3C4421-24





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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.)	0.44	0.54	0.68	1	1.49	dB

#### **Mechanical Specifications**

Cable Assembly Length\* 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 24 in [609.6 mm] 0.156 in [3.96 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	
Туре	SSMC Plug Right Angle	SSMC Plug Right Angle	
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	Brass, Gold	Brass, 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-45204	MIL-G-45204	
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

Compliance Certifications (see product page for current document)

### Plotted and Other Data

Notes:

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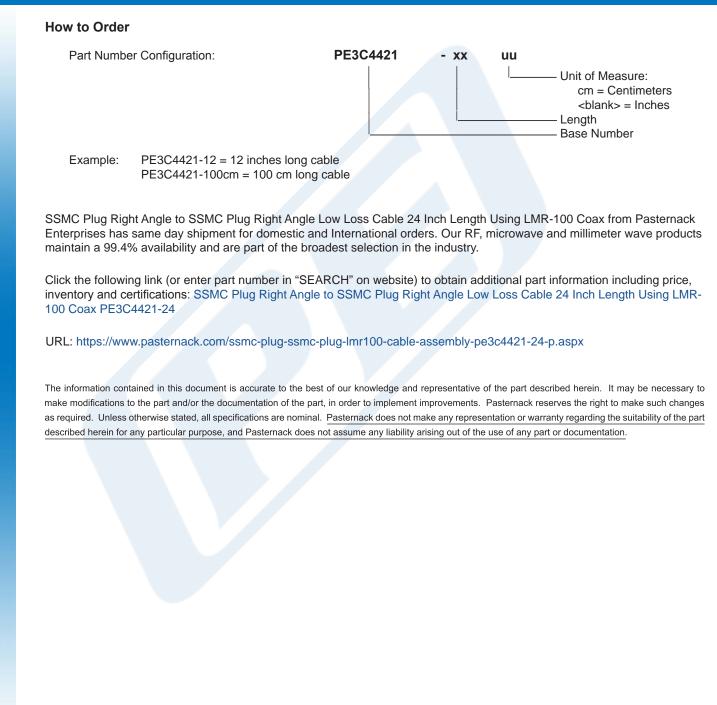






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PE3C4421-24 CAD Drawing SSMC Plug Right Angle to SSMC Plug Right Angle Low Loss Cable 24 Inch Length Using LMR-100 Coax

