

### SMA Female Bulkhead to SSMC Plug Cable Using RG178 Coax

# **RF Cable Assemblies Technical Data Sheet**

### Configuration

- Connector 1: SMA Female Bulkhead
- Connector 2: SSMC Plug
- Cable Type: RG178

#### 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			1.44:1	
Velocity of Propagation		70		%
Capacitance		29.4 [96.46]		pF/ft [pF/m]
		2011[00110]		pi /it [pi

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: SMA Female Bulkhead to SSMC Plug Cable Using RG178 Coax PE3C4395

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

PE3C4395 REV 1.0







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**Specifications by Frequency** 

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.4	1	3		GHz
						dB/m
Insertion Loss (Typ.)	0.14	0.28	0.44	0.78		dB/ft
	0.46	0.92	1.44	2.56		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 Jacket Material Jacket Diameter

Repeated Minimum Bend Radius

0.433 in [11 mm]

RG178 50 Ohms Stranded Copper Clad Steel, Silver PTFE 1 Silver Plated Copper Braid FEP, Tan 0.072 in [1.83 mm]

0.4 in [10.16 mm]

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#### Connectors

Description	Connector 1	Connector 2 SSMC Plug	
Туре	SMA Female Bulkhead		
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	
Dielectric Type	PTFE	Teflon	
Outer Conductor Material and Plating	Brass, Gold		
Body Material and Plating	Brass, Gold	Beryllium Copper, Gold	
Body Plating Specification		MIL-G-45204	
Coupling Nut Material and Plating	Brass, Gold	Beryllium Copper, Gold	
Coupling Nut Plating Specification		MIL-G-45205	
Torque		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

-55 to +165 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data Notes:

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How to Order

Example:

### SMA Female Bulkhead to SSMC Plug Cable Using RG178 Coax

PE3C4395-12 = 12 inches long cable PE3C4395-100cm = 100 cm long cable

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part of the broadest selection in the industry.

Part Number Configuration:

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Unit of Measure: cm = Centimeters <blank> = Inches

Length Base Number

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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SMA Female Bulkhead to SSMC Plug Cable Using RG178 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

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inventory and certifications: SMA Female Bulkhead to SSMC Plug Cable Using RG178 Coax PE3C4395

URL: https://www.pasternack.com/sma-female-ssmc-plug-rg178bu-cable-assembly-pe3c4395-p.aspx

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### PE3C4395 CAD Drawing SMA Female Bulkhead to SSMC Plug Cable Using RG178 Coax

