



#### RF Cable Assemblies Technical Data Sheet

PE3C4397-18

#### Configuration

Connector 1: BNC MaleConnector 2: SSMC PlugCable Type: RG178

#### **Features**

- SSMC Cable Assembly Max. Operating Frequency of 1 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		1,000	MHz
VSWR			1.44:1	
Velocity of Propagation		70		%
Capacitance		29.4 [96.46]		pF/ft [pF/m]
Operating Voltage (AC)			250	Vrms

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: BNC Male to SSMC Plug Cable 18 Inch Length Using RG178 Coax PE3C4397-18







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#### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	100	400	1,000			MHz
Insertion Loss (Typ.)	0.41	0.62	0.87			dB

#### **Mechanical Specifications**

Cable Assembly

Length\* 18 in [457.2 mm] Diameter 0.57 in [14.48 mm]

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

**RG178** 50 Ohms Stranded

Copper Clad Steel, Silver

**PTFE** 

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	
Туре	BNC Male	SSMC Plug	
Specification	MIL-STD-348A		
Impedance	50 Ohms	50 Ohms	
Mating Cycles		500	
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold	
Contact Plating Specification	30 μin minimum	MIL-G-45204	
Dielectric Type	PTFE	Teflon	
Body Material and Plating	Brass, Nickel	Beryllium Copper, 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-45205	
Torque		1.75 in-lbs [0.2 Nm]	

Mechanical Specification Notes:

#### **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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<sup>\*</sup>All cable assemblies have a length tolerance of 1.5% or  $\pm$  3/8", whichever is greater.





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#### **How to Order**



Example: PE3C4397-12 = 12 inches long cable

PE3C4397-100cm = 100 cm long cable

BNC Male to SSMC Plug Cable 18 Inch Length 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 part of the broadest selection in the industry.

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URL: https://www.pasternack.com/bnc-male-ssmc-plug-rg178bu-cable-assembly-pe3c4397-18-p.aspx

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.



PE3C4397-18 CAD Drawing
BNC Male to SSMC Plug Cable 18 Inch Length Using RG178 Coax

