



75 Ohm SMC Plug to 75 Ohm SMC Jack
Cable Using 75 Ohm RG187 Coax

RF Cable Assemblies Technical Data Sheet

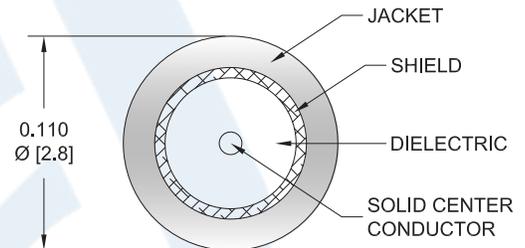
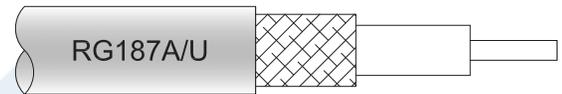
PE3W08970

Configuration

- Connector 1: SMC Plug
- Connector 2: SMC Jack
- Cable Type: RG187

Features

- Max Frequency 1 GHz
- 70% Phase Velocity
- PTFE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W08970 75 ohm SMC plug to 75 ohm SMC jack cable using 75 ohm RG187 coax is part of our full line of RF components available for same-day shipping. Pasternack's flexible RF cable assemblies are ideal for applications where tight bends and flexure are required. This Pasternack SMC to SMC cable assembly has a plug to jack gender configuration with 75 ohm flexible RG187 coax. The PE3W08970 SMC plug to SMC jack cable assembly operates to 1 GHz.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other available RF cable assembly value added services include connector orientation or clocking, heat shrink booting and custom labeling. RF testing can also be performed to document the electrical performance of your cable assembly.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [75 Ohm SMC Plug to 75 Ohm SMC Jack Cable Using 75 Ohm RG187 Coax PE3W08970](#)



75 Ohm SMC Plug to 75 Ohm SMC Jack
Cable Using 75 Ohm RG187 Coax

RF Cable Assemblies Technical Data Sheet

PE3W08970

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		1,000	MHz
Velocity of Propagation		70		%
Capacitance		19.5 [63.98]		pF/ft [pF/m]
DC Resistance Inner Conductor		245 [803.81]		Ω /1000ft [Ω /Km]

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	50	100	250	500	1,000	MHz
Insertion Loss (Typ.)	0.186	0.193	0.212	0.245	0.31	dB/ft
	0.61	0.63	0.7	0.8	1.02	

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

Weight 0.046 lbs [20.87 g]

Cable

Cable Type RG187
 Impedance 75 Ohms
 Inner Conductor Type Stranded
 Inner Conductor Material and Plating Copper Clad Steel, Silver
 Dielectric Type PTFE
 Number of Shields 1
 Shield Layer 1 Silver Plated Copper Braid
 Jacket Material PTFE, White
 Jacket Diameter 0.102 in [2.59 mm]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [75 Ohm SMC Plug to 75 Ohm SMC Jack Cable Using 75 Ohm RG187 Coax PE3W08970](#)



75 Ohm SMC Plug to 75 Ohm SMC Jack
Cable Using 75 Ohm RG187 Coax

RF Cable Assemblies Technical Data Sheet

PE3W08970

Connectors

Description	Connector 1	Connector 2
Type	SMC Plug	SMC Jack
Specification		MIL-STD-348
Impedance	75 Ohms	75 Ohms
Contact Material and Plating	Beryllium Copper, Gold	Gold
Contact Plating Specification	30 µin minimum	MIL-G-45204
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin minimum	QQ-N-290
Coupling Nut Material and Plating	Brass, Nickel	
Coupling Nut Plating Specification	100 µin minimum	

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [75 Ohm SMC Plug to 75 Ohm SMC Jack Cable Using 75 Ohm RG187 Coax PE3W08970](#)



75 Ohm SMC Plug to 75 Ohm SMC Jack
Cable Using 75 Ohm RG187 Coax

RF Cable Assemblies Technical Data Sheet

PE3W08970

How to Order

Part Number Configuration:

PE3W08970

- **xx**

uu

Unit of Measure:
cm = Centimeters
<blank> = Inches
Length
Base Number

Example: PE3W08970-12 = 12 inches long cable
PE3W08970-100cm = 100 cm long cable

75 Ohm SMC Plug to 75 Ohm SMC Jack Cable Using 75 Ohm RG187 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.

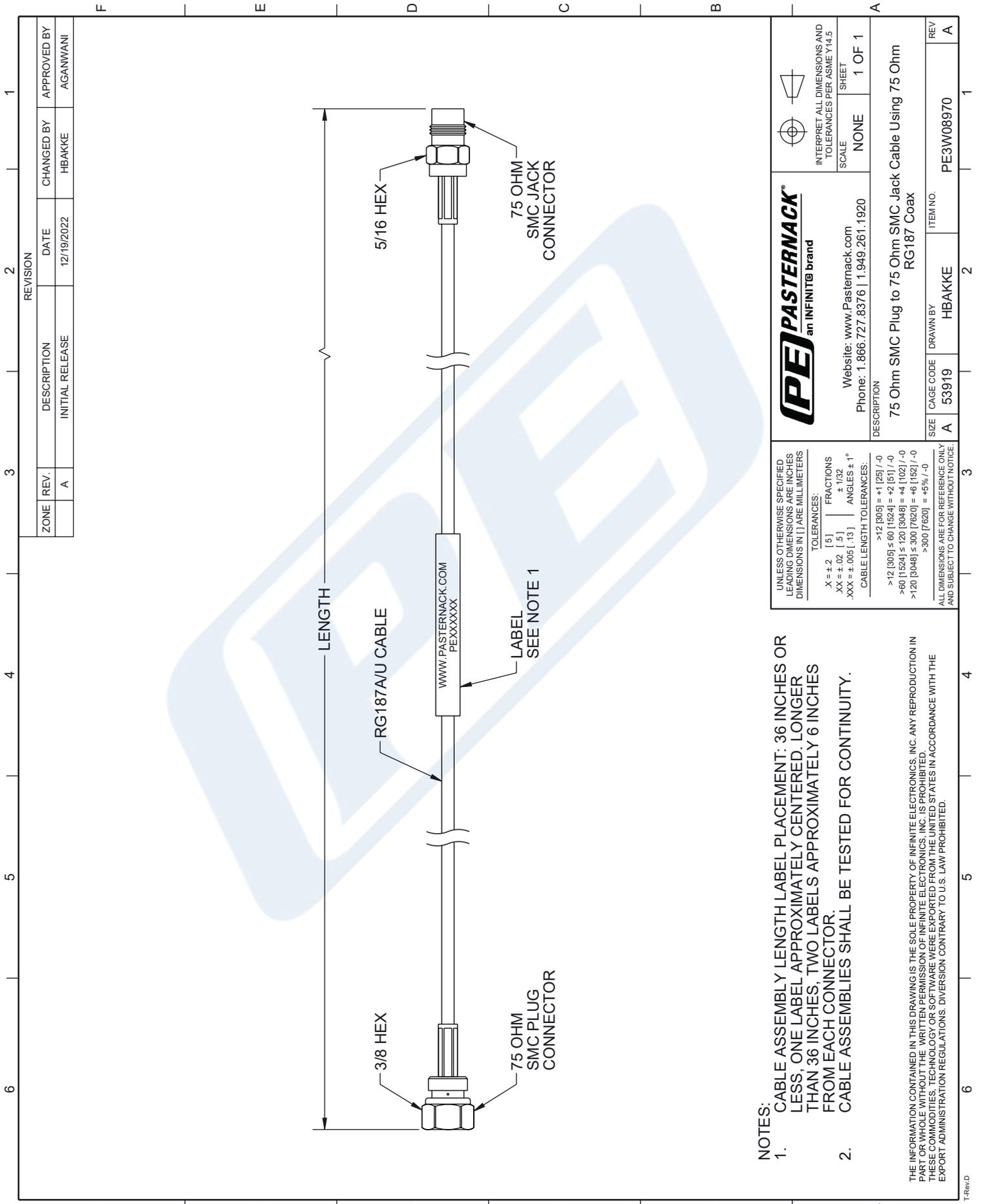
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [75 Ohm SMC Plug to 75 Ohm SMC Jack Cable Using 75 Ohm RG187 Coax PE3W08970](https://www.pasternack.com/75-ohm-smc-plug-to-75-ohm-smc-jack-cable-using-rg187-pe3w08970-p.aspx)

URL: <https://www.pasternack.com/75-ohm-smc-plug-to-75-ohm-smc-jack-cable-using-rg187-pe3w08970-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.

PE3W08970 CAD Drawing

75 Ohm SMC Plug to 75 Ohm SMC Jack Cable Using 75 Ohm RG187 Coax



ZONE		REV.	DESCRIPTION	DATE	CHANGED BY	APPROVED BY
1	A		INITIAL RELEASE	12/19/2022	HBAKKE	AGANWANI

REVISION	
1	
2	
3	
4	
5	
6	

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:
 X = ±.2 [5] FRACTIONS ± 1/32
 .XX = ±.02 [.5] ANGLES ± 1°
 .XXX = ±.005 [.13] CABLE LENGTH TOLERANCES:
 >12 [305] = +1 [25] / -0
 >12 [305] ≤ 60 [1524] = +2 [51] / -0
 >60 [1524] ≤ 120 [3048] = +4 [102] / -0
 >120 [3048] ≤ 300 [7620] = +6 [152] / -0
 >300 [7620] = +5% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE

NOTES:

- CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
- CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

PE PASTERNAK
an INFINITE brand

Website: www.Pasternack.com
 Phone: 1.866.727.8376 | 1.949.261.1920

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE SHEET: 1 OF 1

DESCRIPTION: 75 Ohm SMC Plug to 75 Ohm SMC Jack Cable Using 75 Ohm RG187 Coax

SIZE: A CAGE CODE: 53919 DRAWN BY: HBAKKE ITEM NO.: PE3W08970

REV: A