

SMA Male to SMA Female Bulkhead Cable Using RG142 Coax with HeatShrink



PE3494/HS

Configuration

- Connector 1: SMA Male
- Connector 2: SMA Female Bulkhead
- Cable Type: RG142
- Coax Flex Type: Flexible

Features

- Max Frequency 8 GHz
- 70% Phase Velocity
- Double Shielded
- FEP Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3494/HS SMA male to SMA female bulkhead cable using RG142 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 SMA to SMA cable assembly has a male to female gender configuration with 50 ohm flexible RG142 coax. The PE3494/HS SMA male to SMA female cable assembly operates to 8 GHz. Our RF cable assembly with SMA bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness.

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.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		8	GHz
VSWR			1.4:1	
Velocity of Propagation		70		%
Capacitance		29.4 [96.46]		pF/ft [pF/m]
Operating Voltage (AC)			500	Vrms

Specifications by Frequency

SMA Male to SMA Female Bulkhead Cable Using RG142 Coax with HeatShrink



PE3494/HS

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency	500	1000	2000	4000	8000	
PE3494/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.09	0.13	0.18	0.28	0.442	dB/ft	
			0.29	0.43	0.61	0.92	1.45	dB/m	
PE3494/HS-12	12 inch	Insertion Loss (Typ.)	0.29	0.33	0.39	0.48	0.65	dB	0.07
PE3494/HS-24	24 inch	Insertion Loss (Typ.)	0.38	0.46	0.57	0.76	1.09	dB	0.112
PE3494/HS-36	36 inch	Insertion Loss (Typ.)	0.47	0.59	0.76	1.04	1.53	dB	0.154
PE3494/HS-48	48 inch	Insertion Loss (Typ.)	0.55	0.72	0.94	1.32	1.97	dB	0.196
PE3494/HS-60	60 inch	Insertion Loss (Typ.)	0.64	0.85	1.12	1.6	2.41	dB	0.238

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1:	0.1 dB
Loss due to Connector 2:	0.1 dB
Base Weight:	0.07 pounds
Additional Weight per Inch:	0.0035 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.07 lbs [31.75 g]

Cable

Cable Type	RG142
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Steel, Silver
Dielectric Type	PTFE
Number of Shields	2
Shield Layer 1	Silver Plated Copper Braid
Shield Layer 2	Silver Plated Copper Braid
Jacket Material	FEP, Tan
Jacket Diameter	0.195 in [4.95 mm]
Repeated Minimum Bend Radius	1 in [25.4 mm]

SMA Male to SMA Female Bulkhead Cable Using RG142 Coax with HeatShrink



PE3494/HS

Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMA Female Bulkhead
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Specification	50 µin minimum	50 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin minimum	100 µin minimum
Coupling Nut Material and Plating	Brass, Nickel	
Coupling Nut Plating Specification	100 µin minimum	
Hex Size	5/16 inch	
Torque	3 in-lbs 0.34 Nm	

Environmental Specifications

Operating Range Temperature -55 to +165 deg C

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

Plotted and Other Data

Notes:

SMA Male to SMA Female Bulkhead Cable Using RG142 Coax with HeatShrink

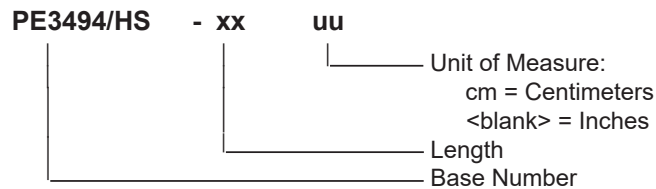


PE3494/HS

Typical Performance Data

How to Order

Part Number Configuration:



Example: PE3494/HS-12 = 12 inches long cable
PE3494/HS-100cm = 100 cm long cable

SMA Male to SMA Female Bulkhead Cable Using RG142 Coax with HeatShrink 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.

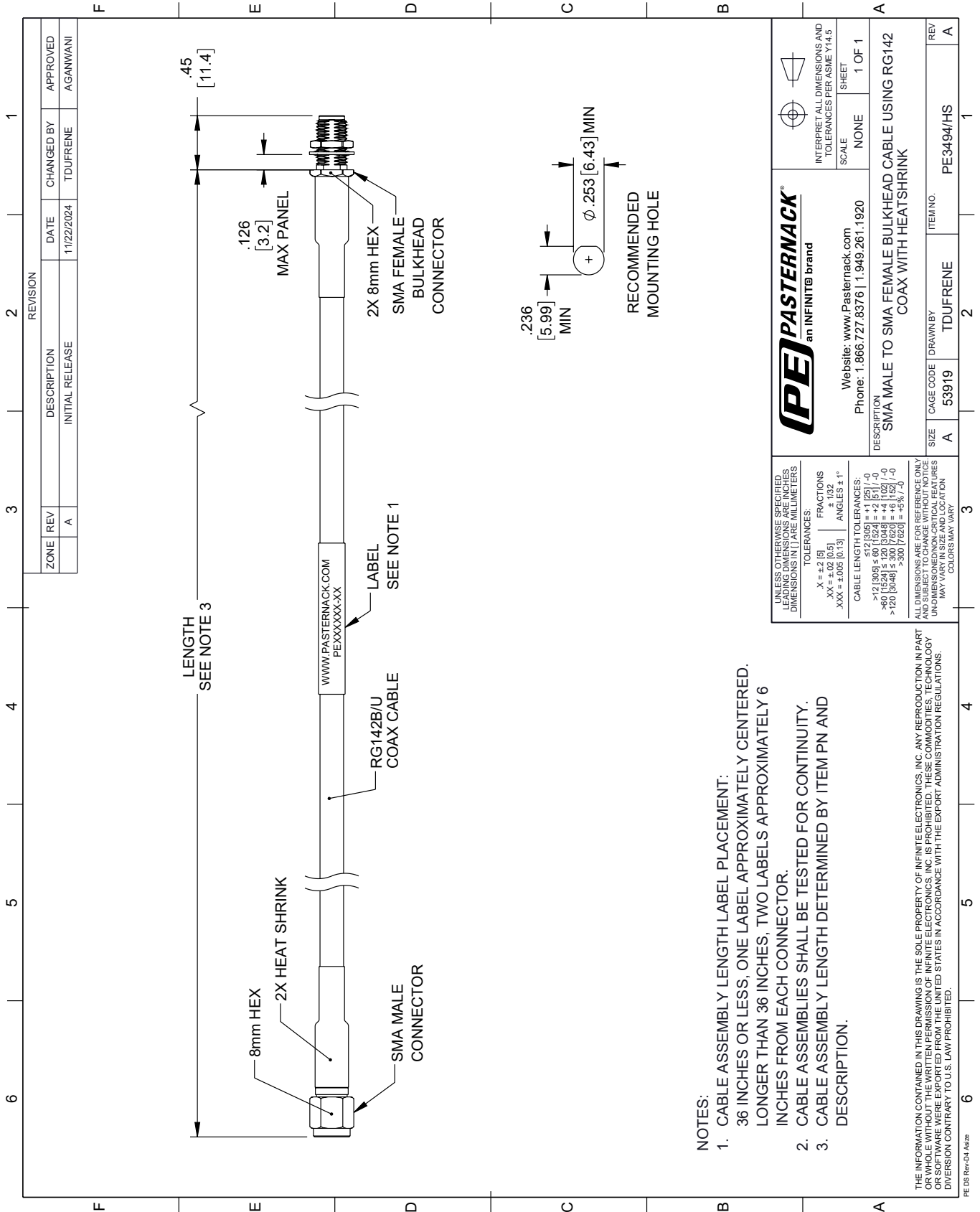
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to SMA Female Bulkhead Cable Using RG142 Coax with HeatShrink PE3494/HS](#)

URL: <https://www.pasternack.com/sma-male-to-sma-female-bulkhead-cable-using-rg142-with-heatshrink-pe3494-hs-p.aspx>

The information contained within 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 Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

PE3494/HS CAD Drawing

SMA Male to SMA Female Bulkhead Cable Using RG142 Coax with HeatShrink



NOTES:

1. 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.
2. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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. DIVISION CONTRARY TO U.S. LAW PROHIBITED.

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

TOLERANCES:
 .X = ±.2 [5] FRACTIONS ± 1/32
 .XX = ±.02 [0.5] ANGLES ± 1°
 .XXX = ±.005 [0.13]

CABLE LENGTH TOLERANCES:
 >12 [305] ≤ 60 [1524] = ±.1 [2.5] / -0
 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0
 >120 [3048] ≤ 300 [7620] = ±.8 [20] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

PE PASTERNAK an INFINIT [®] brand		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	
Website: www.Pasternack.com		SCALE	SHEET
Phone: 1.866.727.8376 1.949.261.1920		NONE	1 OF 1
DESCRIPTION SMA MALE TO SMA FEMALE BULKHEAD CABLE USING RG142 COAX WITH HEATSHRINK			
SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	TDUFRENE	PE3494/HS
REV	REV		A