



SHV Plug to SHV Plug Cable 50 cm Length Using RG142 Coax

RF Cable Assemblies Technical Data Sheet

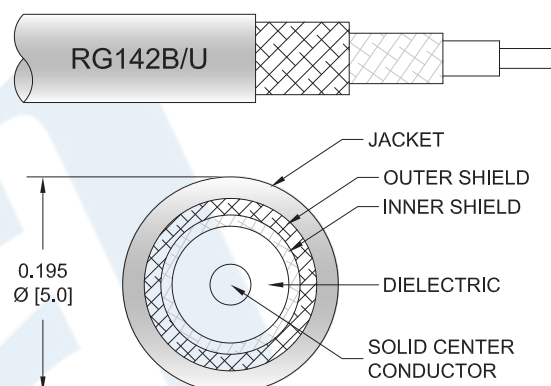
PE3W03503-50CM

Configuration

- Connector 1: SHV Plug
- Connector 2: SHV Plug
- Cable Type: RG142

Features

- Max Frequency 300 MHz
- 70% Phase Velocity
- Double Shielded
- FEP Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W03503-50CM SHV plug to SHV plug 50 cm 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 SHV to SHV cable assembly has a plug to plug gender configuration with 50 ohm flexible RG142 coax. The PE3W03503-50CM SHV plug to SHV plug cable assembly operates to 300 MHz. 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		300	MHz
VSWR			1.4:1	
Velocity of Propagation		70		%
Capacitance		29.4 [96.46]		pF/ft [pF/m]
Operating Voltage (AC)			1,900	Vrms

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SHV Plug to SHV Plug Cable 50 cm Length Using RG142 Coax PE3W03503-50CM](#)



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Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	100	300				MHz
Insertion Loss (Max.)	0.27	0.3				dB

Electrical Specification Notes:

The Insertion Loss data above is base on the performance specifications of the coax use in the assembly. The Insertion Loss includes an estimated insertion loss of 0.2dB of connector loss.

Mechanical Specifications

Cable Assembly

Length*	19.68 in [499.87 mm]
Diameter	0.571 in [14.5 mm]

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]
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Connectors

Description	Connector 1	Connector 2
Type	SHV Plug	SHV Plug
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	30 µin minimum	30 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	Brass, Nickel
Coupling Nut Plating Specification	100 µin minimum	100 µin minimum

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

Part Number Configuration:

PE3W03503

- **xx**

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

Example: PE3W03503-12 = 12 inches long cable
PE3W03503-100cm = 100 cm long cable

SHV Plug to SHV Plug Cable 50 cm Length Using RG142 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.

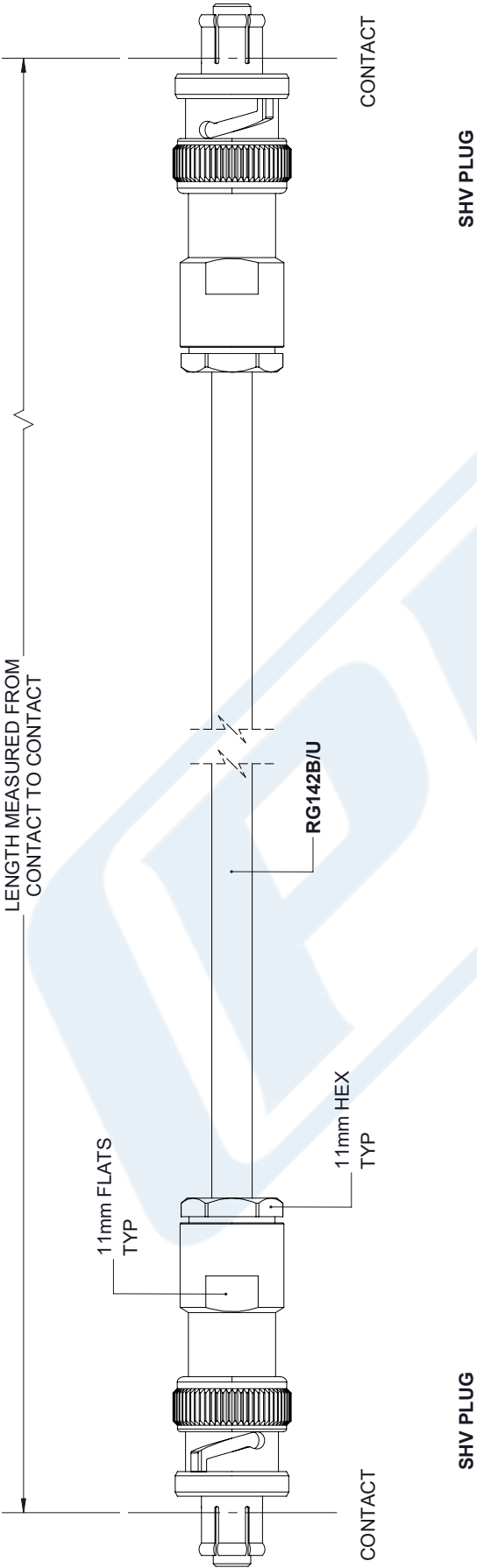
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SHV Plug to SHV Plug Cable 50 cm Length Using RG142 Coax PE3W03503-50CM](https://www.pasternack.com/shv-plug-shv-plug-rg142bu-cable-assembly-pe3w03503-50cm-p.aspx)

URL: <https://www.pasternack.com/shv-plug-shv-plug-rg142bu-cable-assembly-pe3w03503-50cm-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.

PE3W03503-50CM CAD Drawing
SHV Plug to SHV Plug Cable 50 cm Length Using RG142 Coax

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	04/23/19	SELLIS



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS			
TOLERANCES:			
X±.2	[5.08]	FRACTIONS	
.XX±.01	[.25]		±.132
.XXX±.005	[.13]	ANGLES ± 1°	
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.			
THIRD-ANGLE PROJECTION			

 an INFINITO brand Pasternack Enterprises, Inc. P.O.Box 16759, Irvine, CA 92623. Phone: 1.949.261.1920 1.866.727.8376 Fax: 1.949.261.7451 www.pasternack.com e-mail: sales@pasternack.com				THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION. ALL RIGHTS RESERVED.			
				SHEET 1	OF 1		
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SIZE	CAGE	DRAWN BY	PART NUMBER	REV			
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