RF Cable Assemblies Technical Data Sheet — PE3117

Configuration

- Connector 1: SHV Plug
- Connector 2: SHV Plug
- Cable Type: RG214

Features

- Max Frequency 300 MHz
- 66% Phase Velocity
- Double Shielded
- PVC Jacket

Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3117 SHV plug to SHV plug cable using RG214 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 RG214 coax. The PE3117 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.

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 Using RG214 Coax PE3117

SHV Plug to SHV Plug Cable Using RG214 Coax

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		300	MHz
VSWR			1.5:1	
Velocity of Propagation		66		%
Capacitance		30.8 [101.05]		pF/ft [pF/m]
Operating Voltage (AC)			3,500	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	50	100	250	300		MHz
Insertion Loss (Max.)	0.013	0.021	0.03	0.033		dB/ft
	0.04	0.07	0.1	0.11		dB/m
Insertion Loss (Typ.)	0.01	0.02	0.029	0.032		dB/ft
	0.03	0.07	0.1	0.1		dB/m

Mechanical Specifications

Cable Assembly
Diameter   0.57 in [14.48 mm]

Cable
Cable Type   RG214
Impedance   50 Ohms
Inner Conductor Type   Stranded
Inner Conductor Material and Plating   Copper, Silver
Dielectric Type   PE
Number of Shields   2
Shield Layer 1   Silver Plated Copper Braid
Shield Layer 2   Silver Plated Copper Braid
Jacket Material   PVC, Black
Jacket Diameter   0.425 in [10.8 mm]

Repeated Minimum Bend Radius   1.6 in [40.64 mm]

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SHV Plug to SHV Plug Cable Using RG214 Coax

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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

Environmental Specifications
Temperature
Operating Range   -20 to +80 deg C

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: SHV Plug to SHV Plug Cable Using RG214 Coax PE3117

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

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RF Cable Assemblies Technical Data Sheet   PE3117

How to Order

Part Number Configuration: **PE3117**   **- xx**   **uu**

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

Example: PE3117-12 = 12 inches long cable
PE3117-100cm = 100 cm long cable

SHV Plug to SHV Plug Cable Using RG214 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 Using RG214 Coax PE3117

URL: https://www.pasternack.com/shv-plug-shv-plug-rg214u-cable-assembly-pe3117-p.aspx
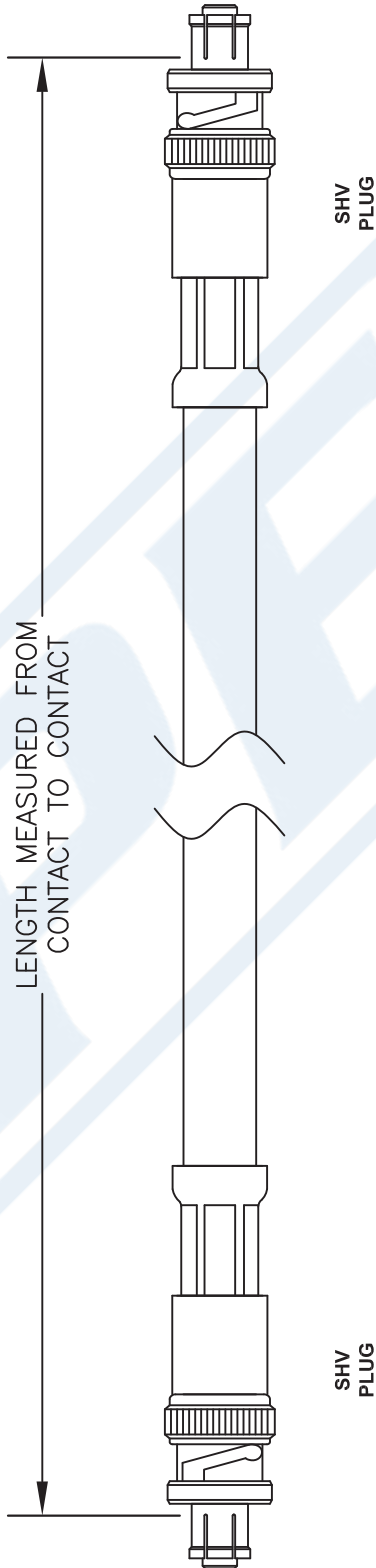
The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such 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.

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PE3117 CAD Drawing
SHV Plug to SHV Plug Cable Using RG214 Coax

Standard Lengths

-12	12"
-24	24"
-36	36"
-48	48"
-60	60"
-XXX	Custom Length in Inches

SHV PLUG

SHV PLUG

LENGTH MEASURED FROM CONTACT TO CONTACT

NOTES:
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].
4. LENGTH TOLERANCE IS ± 1.5% OR 3/8", WHICHEVER IS GREATER.

DWG TITLE				
PE3117-XX				
REV. -	FSCM NO. **53919**	CAD FILE 020108	SCALE N/A	SIZE A
				127

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