



## SHV Plug Right Angle to SHV Plug Right Angle Cable Using RG316 Coax

### RF Cable Assemblies Technical Data Sheet

**PE3C9508**

#### Configuration

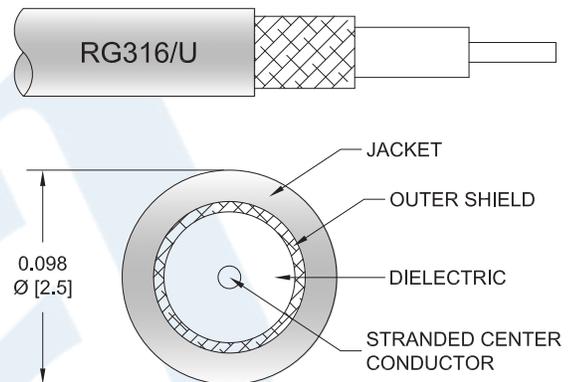
- Connector 1: SHV Plug Right Angle
- Connector 2: SHV Plug Right Angle
- Cable Type: RG316

#### Features

- Recessed contacts prevent shock hazards
- Max Frequency 300 MHz
- Shielding Effectivity > 45 dB
- 66% Phase Velocity
- PVC Jacket
- Dielectric withstanding of 5kV
- Shock, Moisture & Corrosion resistant

#### Applications

- General Purpose
- Laboratory Use
- Nuclear Instrumentation
- High Voltage Electrical Transmission
- Semiconductor Test



#### Description

Pasternack's PE3C9508 SHV plug right angle to SHV plug right angle cable using RG316 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 such as nuclear instrumentation and semiconductor testing, where transmission of high voltage signals over coax is required. This Pasternack SHV to SHV cable assembly has a plug to plug gender configuration with 50 ohm flexible RG316 coax. The PE3C9508 SHV plug to SHV plug cable assembly operates to 300 MHz. The right angle SHV interfaces on the RG316 cable allow for easier connections in tight spaces. Safety High Voltage (SHV) connectors are designed to allow signal transmission with high voltage ratings without safety risk for the operators. Both the pin and socket contacts are securely recessed inside the insulation to guard against potential electrical shock when live unmated connectors are handled.

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 Right Angle to SHV Plug Right Angle Cable Using RG316 Coax PE3C9508](#)



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**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		300	MHz
Velocity of Propagation		69		%
Operating Voltage (AC)			900	Vrms
Dielectric Withstanding Voltage (AC)			2,000	Vrms
Jacket Spark			2,000	Vrms

**Specifications by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	50	100	250	300		MHz
Insertion Loss (Typ.)	0.075	0.11	0.16	0.176		dB/ft
	0.25	0.36	0.52	0.58		dB/m

**Electrical Specification Notes:**

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.2 dB per connector.

**Mechanical Specifications**

**Cable Assembly**

Weight 0.31 lbs [140.61 g]

**Cable**

Cable Type RG316  
 Impedance 50 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 FEP, Tan  
 Jacket Diameter 0.102 in [2.59 mm]

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**Connectors**

Description	Connector 1	Connector 2
Type	SHV Plug Right Angle	SHV Plug Right Angle
Specification	MIL-STD-348B	MIL-STD-348B
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Tinned Copper	Brass, Tinned Copper
Dielectric Type	Teflon	Teflon
Body Material and Plating	Brass, Tinned Copper	Brass, Tinned Copper
Coupling Nut Material and Plating	Brass, Tinned Copper	Brass, Tinned Copper

**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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## SHV Plug Right Angle to SHV Plug Right Angle Cable Using RG316 Coax

### RF Cable Assemblies Technical Data Sheet

**PE3C9508**

#### How to Order

Part Number Configuration:

**PE3C9508**

- **xx**

**uu**

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

Example: PE3C9508-12 = 12 inches long cable  
PE3C9508-100cm = 100 cm long cable

SHV Plug Right Angle to SHV Plug Right Angle Cable Using RG316 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.

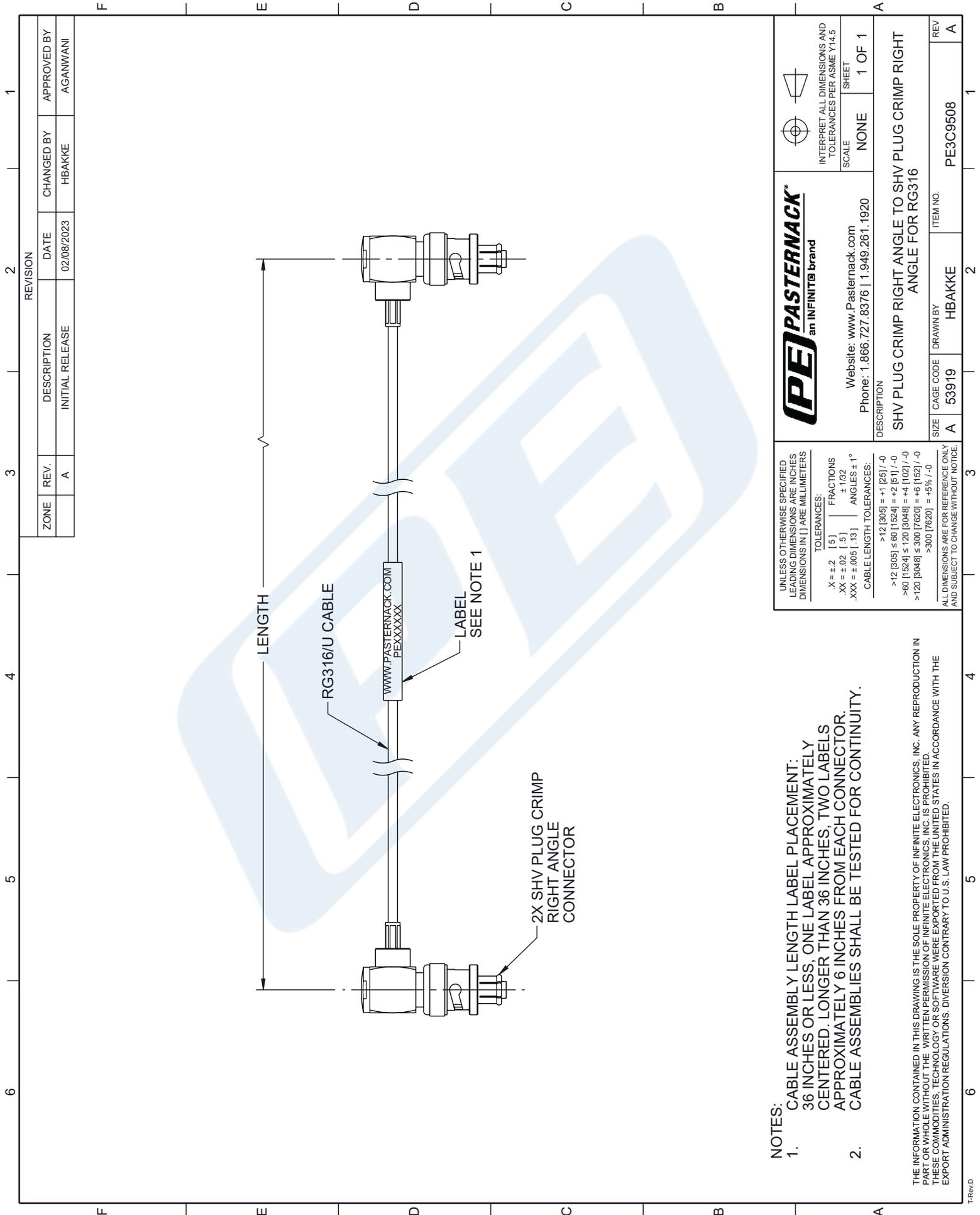
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URL: <https://www.pasternack.com/shv-plug-right-angle-to-shv-plug-cable-using-rg316-pe3c9508-p.aspx>

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.

# PE3C9508 CAD Drawing

SHV Plug Right Angle to SHV Plug Right Angle Cable Using RG316 Coax



REVISION		DATE	CHANGED BY	APPROVED BY
ZONE	REV.	DESCRIPTION	INITIAL RELEASE	
	A			AGANWANI

**PE PASTERNAK**  
an INFINITO brand

Website: [www.Pasternack.com](http://www.Pasternack.com)  
Phone: 1.866.727.8376 | 1.949.261.1920

DESCRIPTION  
**SHV PLUG CRIMP RIGHT ANGLE TO SHV PLUG CRIMP RIGHT ANGLE FOR RG316**

SCALE: NONE SHEET: 1 OF 1

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

ITEM NO. PE3C9508

REV. A

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  
 >60 [1524] = +2 [51] / -0  
 >120 [3048] = +4 [102] / -0  
 >300 [7620] = +6 [152] / -0  
 >600 [15240] = +8 [203] / -0

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

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. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.  
 2.

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