



SHV Plug Right Angle to SHV Jack Straight Cable Using 75 Ohm RG59 Coax

RF Cable Assemblies Technical Data Sheet

PE3C9494

Configuration

- Connector 1: SHV Plug Right Angle
- Connector 2: SHV Jack
- Cable Type: RG59

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 PE3C9494 SHV plug right angle to SHV jack cable using 75 ohm RG59 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 jack gender configuration with 75 ohm flexible RG59 coax. The PE3C9494 SHV plug to SHV jack cable assembly operates to 300 MHz. The right angle SHV interface on the RG59 cable allows 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 Jack Straight Cable Using 75 Ohm RG59 Coax PE3C9494](#)



SHV Plug Right Angle to SHV Jack Straight
Cable Using 75 Ohm RG59 Coax

RF Cable Assemblies Technical Data Sheet

PE3C9494

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		300	MHz
Velocity of Propagation		66		%
Capacitance		20.4 [66.93]		pF/ft [pF/m]
Operating Voltage (AC)			2,300	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency		0.1	0.25	0.3		GHz
Insertion Loss (Max.)	0.038	0.059	0.064			dB/ft
	0.12	0.19	0.21			dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB for the Jack connector and 0.2 dB for the Plug connector.

Mechanical Specifications

Cable Assembly

Weight 0.081 lbs [36.74 g]

Cable

Cable Type RG59
 Impedance 75 Ohms
 Inner Conductor Type Solid
 Inner Conductor Material and Plating Copper Clad Steel
 Dielectric Type PE
 Number of Shields 1
 Shield Layer 1 Copper Braid
 Jacket Material PVC (NC), Black
 Jacket Diameter 0.242 in [6.15 mm]

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 Jack Straight Cable Using 75 Ohm RG59 Coax PE3C9494](#)



SHV Plug Right Angle to SHV Jack Straight
Cable Using 75 Ohm RG59 Coax

RF Cable Assemblies Technical Data Sheet

PE3C9494

Connectors

Description	Connector 1	Connector 2
Type	SHV Plug Right Angle	SHV Jack
Specification	MIL-STD-348A	MIL-STD-348B
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold over Nickel over copper	Brass, Gold over Nickel over 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
Hex Size	16-Jul Inch	8-Mar Inch

Environmental Specifications

Temperature

Operating Range

-25 to +70 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 Right Angle to SHV Jack Straight Cable Using 75 Ohm RG59 Coax PE3C9494](#)



SHV Plug Right Angle to SHV Jack Straight Cable Using 75 Ohm RG59 Coax

RF Cable Assemblies Technical Data Sheet

PE3C9494

How to Order

Part Number Configuration:

PE3C9494

- **xx**

uu

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3C9494-12 = 12 inches long cable
PE3C9494-100cm = 100 cm long cable

SHV Plug Right Angle to SHV Jack Straight Cable Using 75 Ohm RG59 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.

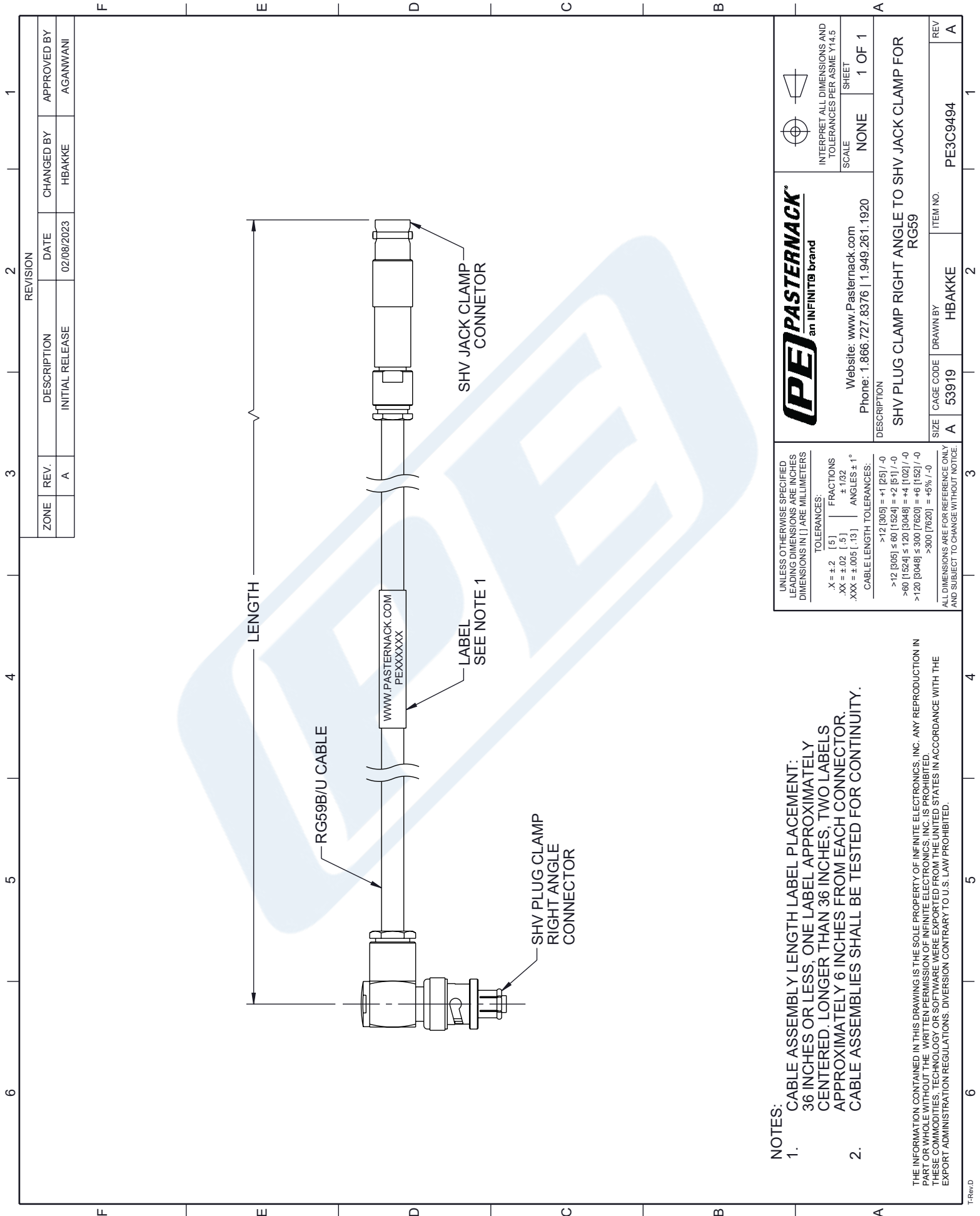
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SHV Plug Right Angle to SHV Jack Straight Cable Using 75 Ohm RG59 Coax PE3C9494](https://www.pasternack.com/shv-plug-right-angle-to-shv-jack-cable-using-rg59-pe3c9494-p.aspx)

URL: <https://www.pasternack.com/shv-plug-right-angle-to-shv-jack-cable-using-rg59-pe3c9494-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.

PE3C9494 CAD Drawing

SHV Plug Right Angle to SHV Jack Straight Cable Using 75 Ohm RG59 Coax



ZONE	REV.	DESCRIPTION	DATE	CHANGED BY	APPROVED BY
	A	INITIAL RELEASE	02/08/2023	HBAKKE	AGANWANI

		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1	
Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920		DESCRIPTION: SHV PLUG CLAMP RIGHT ANGLE TO SHV JACK CLAMP FOR RG59	
SIZE: A	CAGE CODE: 53919	DRAWN BY: HBAKKE	ITEM NO.: PE3C9494

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.

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.

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.