

SHV Plug to SHV Plug Cable Using RG303HV Coax with HeatShrink



PE3W16872/HS

Configuration

- Connector 1: SHV Plug
- Connector 2: SHV Plug
- Cable Type: RG303HV
- Coax Flex Type: Flexible

Features

- Max Frequency 300 MHz
- FEP Jacket

Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W16872/HS SHV plug to SHV plug cable using RG303HV 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 RG303HV coax. The PE3W16872/HS SHV plug to SHV plug cable assembly operates to 300 MHz.

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	
Capacitance		308.4 [1,011.81]		pF/ft [pF/m]

Specifications by Frequency

SHV Plug to SHV Plug Cable Using RG303HV Coax with HeatShrink



PE3W16872/HS

Part Number	Length	Description	F1	F2	F3	F4	Units	Weight (lbs)
		Frequency	50	100	250	300	MHz	
PE3W16872/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.024	0.031	0.052	0.059	dB/ft	
			0.08	0.11	0.18	0.2	dB/m	
PE3W16872/HS-12	12 inch	Insertion Loss (Typ.)	0.23	0.24	0.26	0.26	dB	0.097
PE3W16872/HS-24	24 inch	Insertion Loss (Typ.)	0.25	0.27	0.31	0.32	dB	0.124
PE3W16872/HS-36	36 inch	Insertion Loss (Typ.)	0.28	0.3	0.36	0.38	dB	0.151
PE3W16872/HS-48	48 inch	Insertion Loss (Typ.)	0.3	0.33	0.41	0.44	dB	0.178
PE3W16872/HS-60	60 inch	Insertion Loss (Typ.)	0.32	0.36	0.46	0.5	dB	0.205

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:	0.097 pounds
Additional Weight per Inch:	0.00225 pounds

Mechanical Specifications

Cable Assembly

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

Cable

Cable Type	RG303HV
Impedance	50 Ohms
Inner Conductor Material and Plating	Silver, Copper Clad Aluminum
Dielectric Type	FEP
Number of Shields	1
Shield Layer 1	Silver Plated Copper Braid
Jacket Material	FEP, Red
Jacket Diameter	0.169 in [4.29 mm]
Repeated Minimum Bend Radius	0.788 in [20.02 mm]

SHV Plug to SHV Plug Cable Using RG303HV Coax with HeatShrink



PE3W16872/HS

Connectors

Description	Connector 1	Connector 2
Type	SHV Plug	SHV Plug
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
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

Operating Range Temperature -65 to +165 deg C

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

Plotted and Other Data

Notes:

SHV Plug to SHV Plug Cable Using RG303HV Coax with HeatShrink



PE3W16872/HS

Typical Performance Data

How to Order

Part Number Configuration:

PE3W16872/HS

- xx

uu

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3W16872/HS-12 = 12 inches long cable
PE3W16872/HS-100cm = 100 cm long cable

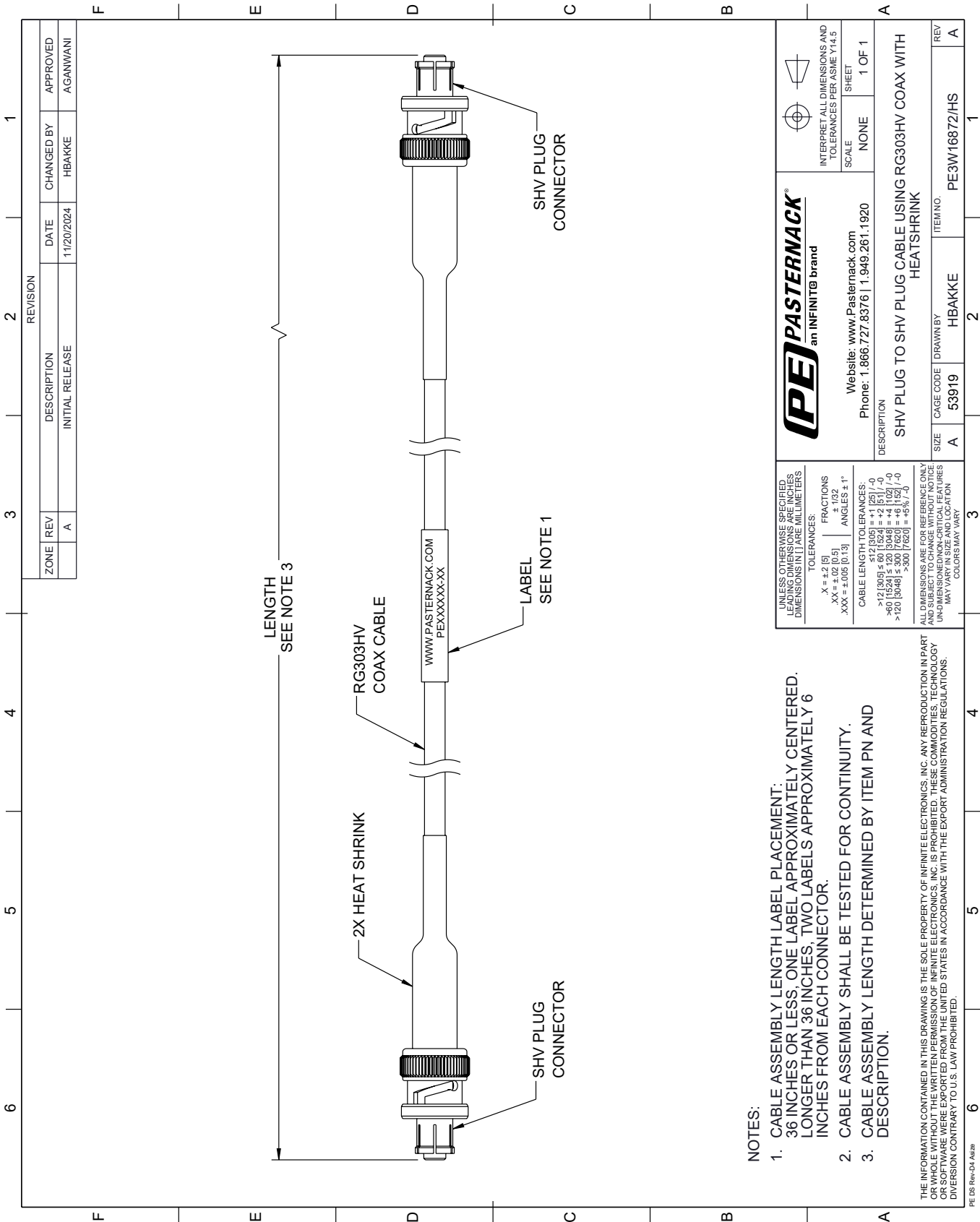
SHV Plug to SHV Plug Cable Using RG303HV Coax with HeatShrink from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SHV Plug to SHV Plug Cable Using RG303HV Coax with HeatShrink PE3W16872/HS](#)

URL: <https://www.pasternack.com/shv-plug-to-shv-plug-cable-using-rg303hv-with-heatshrink-pe3w16872-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.

PE3W16872/HS CAD Drawing
SHV Plug to SHV Plug Cable Using RG303HV 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 ASSEMBLY 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 NOT 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.		PE PASTERNAK® an INFINITE® brand		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	
TOLERANCES:		Website: www.Pasternack.com		SCALE	
.X = ±.2 [5]		Phone: 1.866.727.8376 1.949.261.1920		NONE	
.XX = ±.02 [0.5]		CABLE LENGTH TOLERANCES:		SHEET	
.XXX = ±.005 [0.13]		>12 [305] ≤ 60 [1524] = ±.1 [2.5] / -0		1 OF 1	
ANGLES ± 1°		>60 [1524] ≤ 120 [3048] = ±.4 [102] / -0		DESCRIPTION	
ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.		>120 [3048] ≤ 300 [7620] = ±.5% / 0		SHV PLUG TO SHV PLUG CABLE USING RG303HV COAX WITH HEATSHRINK	
SIZE		CAGE CODE		ITEM NO.	
A		53919		PE3W16872/HS	
DRAWN BY		HBAKKE		REV	
2		1		A	