

SHV Jack R/A PCB Mount Receptacle

Part Number: SVJ-05L-BT-01

PRODUCT OVERVIEW

The SVJ-05L-BT-01 is an SHV jack right-angle PCB mount receptacle. It brings an SHV mating interface to a printed circuit board, with the connector axis parallel to the board and a center termination directed into the PCB.

The engineering drawing specifies a non-constant impedance and a DC to 300 MHz frequency range. Working voltage is 3,500 Vrms, with a dielectric withstanding voltage of 5,000 Vrms and insulation resistance of 1,000 GΩ. These are separate electrical ratings for component selection.

Two PTFE insulators support the contact within a two-piece brass body assembly. The mating-side body and retaining ring have nickel finishes, the PCB-side body has an electroless nickel finish, and the brass contact pin has a gold finish.

The right-angle geometry includes four board mounting posts and a central contact termination. The drawing provides a recommended mounting-hole pattern for layout planning. Review board spacing, insulation, mating hardware and the assembled system against the intended voltage and operating environment.

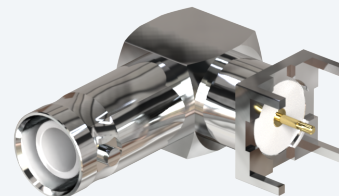
PRODUCT SPECIFICATIONS

Attributes	Details
Part Number	SVJ-05L-BT-01
Series	SHV
Gender	Jack
Orientation	Right angle (R/A)
Mounting	PCB; through-hole
Weight	15.77 g

ELECTRICAL SPECIFICATIONS

Attributes	Details
Impedance	Non-Constant
Frequency range	DC to 300 MHz
Working voltage	3,500 Vrms
Dielectric withstanding voltage	5,000 Vrms
Insulation resistance	1,000 GΩ

Drawing ratings; test conditions and min./typ./max. qualifiers are not specified.



Key Technical:

- Impedance: Non-Constant
- Frequency: DC to 300 MHz
- Working voltage: 3,500 Vrms
- Dielectric withstand: 5,000 Vrms
- Insulation resistance: 1,000 GΩ
- Temperature: -65 °C to +165 °C

Features:

- Right-angle body supports side-entry PCB connections
- Four mounting posts locate the receptacle on the board
- Two PTFE insulators support the contact assembly
- Gold-finished brass contact; nickel-finished body components
- Dimensioned mounting-hole pattern aids board layout

Applications:

- High-voltage laboratory instruments
- PCB interfaces for test equipment
- Detector-bias instrumentation
- SHV equipment development fixtures

Application examples; select against the part ratings and validate the complete PCB assembly.

JAW-DROPPER INNOVATIVE CHANNEL CO., LTD.

JAW-DROPPER Specialist RF Coaxial Connectors/Adapter • RF Cable Assembly

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Mechanical, materials & environmental specifications

Part Number: SVJ-05L-BT-01

MECHANICAL & MOUNTING SPECIFICATIONS

Attributes	Details
Overall length	28.03 mm
Overall height	22.60 mm
PCB-side body (square)	11.08 mm
Mounting post pattern (square)	10.06 mm
Mounting posts	4 × 1.02 mm square
PCB contact diameter	Ø0.95 mm
Recommended mounting holes	4 × Ø1.65 mm (+0.15 / -0.00 mm)
Recommended center hole	Ø1.05 mm (+0.15 / -0.00 mm)
General drawing tolerances	±0.15 mm; angles ±3.0°

The recommended PCB pattern is a reference. Adapt it to the assembly process, board type and electrical or mechanical requirements.

MATERIALS & FINISHES - COMPLETE DRAWING BOM

Item	Component	Material	Finish	Qty
1	Body	Brass	Nickel	1
2	Insulator	PTFE	--	1
3	Retaining Ring	Brass	Nickel	1
4	Body	Brass	Electroless Nickel	1
5	Contact Pin	Brass	Gold	1
6	Insulator	PTFE	--	1

ENVIRONMENTAL & COMPLIANCE INFORMATION

Attributes	Details
Temperature rating	-65 °C to +165 °C
RoHS	(see product page for current document)

ORDERING INFORMATION

Part Number	Description
SVJ-05L-BT-01	SHV Jack R/A PCB Mount Receptacle

ENGINEERING CONSIDERATIONS

Review PCB creepage and clearance, insulation coordination, soldering conditions and the intended mating connector. Confirm the complete assembly against the operating voltage, environmental conditions and applicable equipment requirements.

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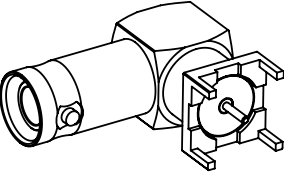
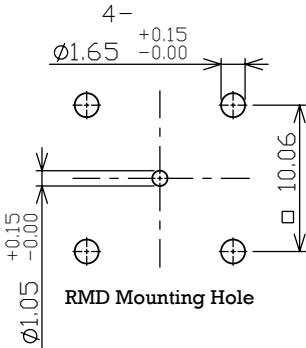
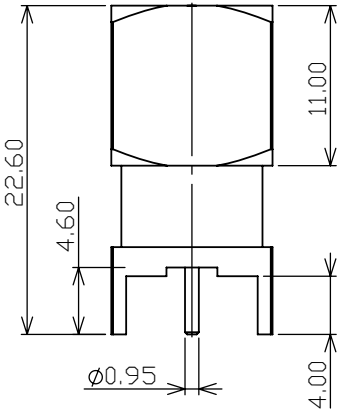
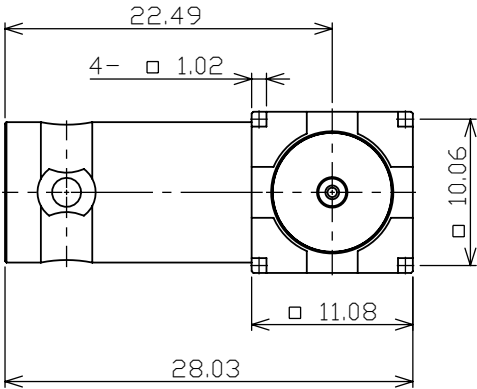
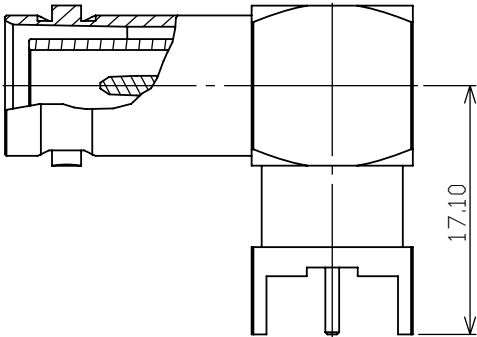
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NO	DESCRIPTION	MATERIAL	FINISH	QTY
1	Body	Brass	Nickel	1
2	Insulator	PTFE	--	1
3	Retaining Ring	Brass	Nickel	1
4	Body	Brass	Electroless Nickel	1
5	Contact Pin	Brass	Gold	1
6	Insulator	PTFE	--	1

Specification

Impedance : Non-Constant
Frequency Range : DC to 300 MHz
Working Voltage : 3,500 Vrms
Dielectric Withstanding Voltage : 5,000 Vrms
Insulation Resistance : 1,000 G-Ohm
Temperature Rating : -65° C to 165° C



SHV Jack R/A
PCB Mount Receptacle

RoHS COMPLIANT

SCALE	2:1
DATE	2023/08/02
DESIGNED	
CHECKER	
APPROVED	

UNIT	mm
COMMON TOLERANCE	±0.15
ANGLES	±3.0°
WEIGHT	13.77 g

JAW Dropper
Innovation Channel Co.,Ltd.

ITEM NO
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