

## AC/DC/PULSE to measurement, VOLTAGE SENSOR

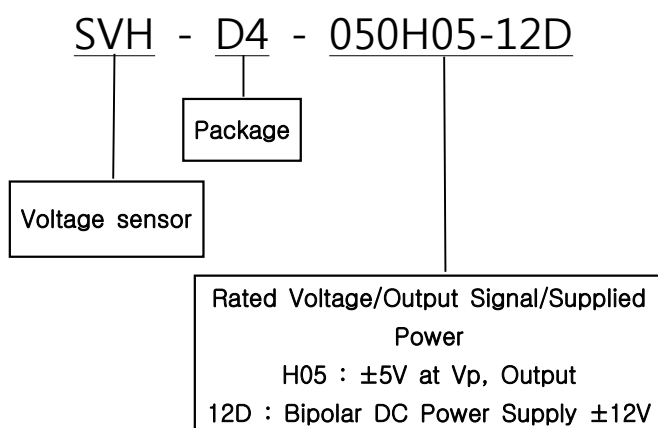
### FEATURES

- Small Sized D4 Package with Multi-Functional Mounts
- For both DC/AC Measurements
- DC ~ AC 50kHz

### APPLICATIONS

- Voltage Measurements of Non-sinusoidal Waves in Power Transformers
- DC/Ripple Measurements of Rectifiers and Battery Chargers/Dischargers
- Measurements of Prevailing Voltage with Frequent Frequency/Phase Changes
- Precision Voltage Measurements of Prevailing Voltages

### MODEL & D4



### DESCRIPTION

SVH-D4 series sensors are voltage sensors for measuring voltages with built-in PV-series PCB mounted voltage sensors. SVH-D4 series also benefit from various mounts of D4 package.

SVH-D4 series sensors have very high linearity for both DC and AC voltage..

Rated voltage of SVH-D4 series sensors may be chosen between 5V and 1,000V. According to the above configured rated voltage, measured voltage and signal voltage are insulated with impedance of 20~100M $\Omega$ .



▲ D4 Package

Dimension 30 x 100 x 49(H)mm

ELECTRICAL CHARACTERISTICS :  $V_s = \pm 12V$ ,  $T_A = 25^\circ C$ 

PARAMETER	SIMBOL	TEST CONDITIONS	025H04	050H04	075H04	UNIT
			025H05	050H05	075H05	
Primary						
Nominal voltage	$V_P$		25	50	75	V
Voltage, measuring range	$V_{PM}$		50	100	150	$V_{P-P}$
Output						
Reference output (A)	$V_{REF}$	at $V_P$	0 (... $\pm 30$ Max.)			mV
Reference output (B)	$I_{REF}$					mA
Nominal output (A)	$V_O$		H04 : $\pm 4$ (H05 : $\pm 5$ )			V
Nominal output (B)	$I_O$					mA
Max, output (A)	$V_{OM}$		$\pm 10.5$			V
Max, output (B)	$I_{OM}$					mA
Power supply						
Supply Voltage	$V_C$	Max. 50mA	$\pm 12 \dots \pm 15$			V
Current consumption	$I_C$		$10 + I_O$			mA
Offset drift						
$V_s$ Temperature	$T_{DR}$	at $V_P=0V$	< 0.07			%/ $^\circ C$
$V_s$ Power supply	$T_{DP}$	$\pm 09V \dots \pm 18V$	< 0.05			%/V
Gain drift						
$V_s$ Temperature	$TDV_O$	at $V_P$	< 0.1			%/ $^\circ C$
$V_s$ Power supply	$TDV_P$	$\pm 09V \dots \pm 18V$	< 0.1			%/V
Accuracy						
Accuracy		at $0V \dots V_P + \text{offset}$	1.0			%
Linearity error		at $0V \dots V_P$	0.5			%
Response time 1 (sensor part)	trs		7			$\mu s$
Response time 2 (converter part)	trc					ms
Frequency bandwidth (-3dB)	BW	Sin wave	20 (50 Max.)			kHz
Temperature						
Operating temperature	$T_A$		$-20 \sim 80$			$^\circ C$
Storage temperature	$T_S$		$-45 \sim 85$			$^\circ C$
Isolation						
AC isolation test			> 3.0			kV
DC isolation test			> 1,000			M $\Omega$
Notes						
Mass			35			g
Case material			NP66			
Standards						

※ The specification above corresponds to the products listed below.

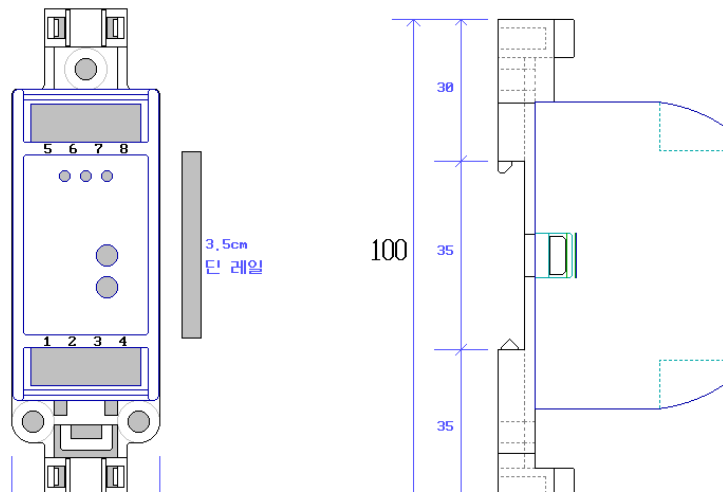
SVH-D4-100H04-12D ... SVH-D4-400H04-12D

SVH-D4-100H05-12D ... SVH-D4-400H05-12D

# SVH-D4

## VOLTAGE SENSOR

DIMENSIONS (in mm)



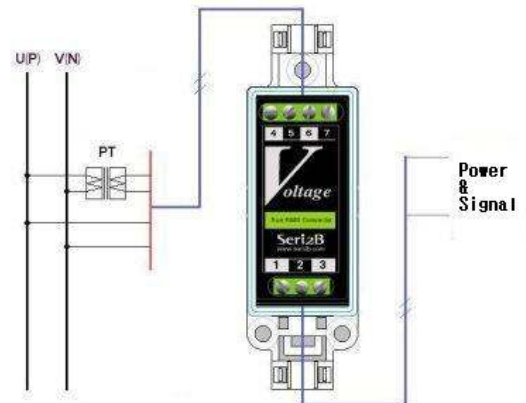
### ▼ PIN - COMPOSITION

1 : +12V IN	5 : +Vp IN
2 : -12V IN	6 : N.C.
3 : SIGNAL OUT	7 : N.C.
4 : 0V IN/OUT	8 : -Vp IN

#### ※ Note

Make sure to connect voltage wire to be measured to pin number 5 and 8.

### ▼ Wiring Diagram



### SAFETY

- Maximum allowed voltage to be measured is 3 times the rated voltage. Exceeding this voltage may cause disconnection of coils and/or fire.
- Be sure to supply rated voltage for supplying power. Using voltage out of the rated voltage range may cause malfunctions.
- This product is not perfectly waterproof. Therefore, when using this product in outdoors, be cautious for having this product to be exposed to excessive humidity or moisture.