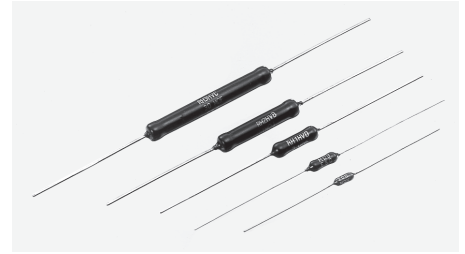


RH TYPE

Superhigh Precision High Voltage Resistors



The RH type resistors are used mainly in the physical and chemical measuring instruments, X-ray apparatuses, electron microscopes, and other industrial equipments.

FEATURES

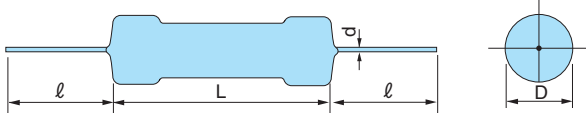
- Markedly small temperature coefficient.
- Small in size, light weight, and high reliability.
- Minimized resistance change in long-term stability and load life.
- Protected from changes in pulse voltage.
- A wide range of resistance values stably obtained.
- Fire-retarding.

CHARACTERISTICS

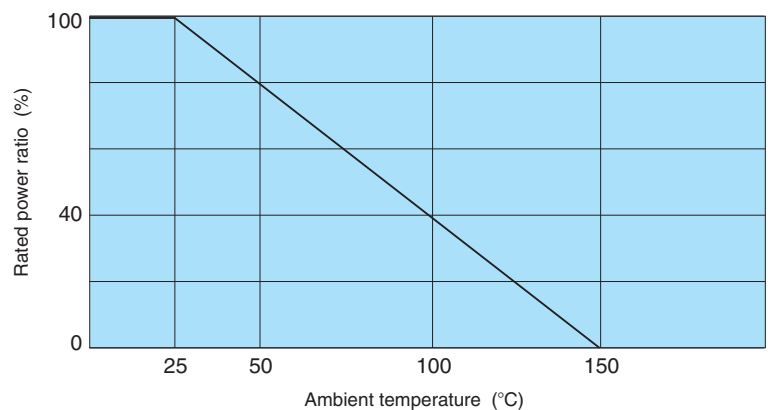
Item	Characteristics	Test method
Operating temperature range	-55°C~+150°C	
Short-time overload	±0.5%	Rated voltage×2.5 applied for 5sec
Long-term stability	±0.5%	At normal temperature and humidity for 10,000hr.
Moisture load life	±0.5%	40°C, 90 to 95%RH, Rated power×1/2, 1,000hr.
load life	±0.5%	25°C, Rated power×1/2, 3,000hr.
Resistance to soldering heat	±0.2%	380°C, 3sec.
Temperature coefficient	※1 "A" characteristic, ±10ppm/°C	The test data is based on a temperature difference of 100°C (reference temperature, 25°C measurement temperature, 125°C).
	"B" characteristic, ±25ppm/°C	
	"C" characteristic, ±50ppm/°C	
	"D" characteristic, ±100ppm/°C	
	"S" characteristic, ±200ppm/°C	

<CAUTION>
 Rated power recommend
 derate less than 50% for
 long term use.

● Shape



● Derating Curve



PRODUCTION DATA

Type	Characteristics		Range of resistance values		Rated power (W)	Max. working voltage DC (kV)	Impulse voltage (kV) 1.2×50 μsec	Dimensions (mm)				Resistance tolerance (%)
	Symbol	Temperature coefficient (ppm/°C)	Min. (MΩ)	Max. (MΩ)				L	D	ℓ	d	
RH1/8HV	B	±25	0.1	50	1/8	0.5	1.25	6±1	2±0.6	30±3	0.6±0.05	±0.5 (D) ≤1GΩ ±1 (F) ±2 (G) ±5 (J) ±10 (K)
	C	±50	0.05	100								
	D	±100	0.01	100								
	S	±200	0.01	500								
RH1/4HV	B	±25	0.1	50	1/4	0.75	1.5	9±1	3±1	38±3	0.6±0.05	
	C	±50	0.1	100								
	D	±100	0.01	300								
	S	±200	0.01	1000								
RH1/2HV	B	±25	0.1	50	1/2	1.5	3	13±1	4.5±1	38±3	0.8±0.05	
	C	±50	0.1	100								
	D	±100	0.1	1000								
	S	±200	0.1	5000								
RH1HV	B	±25	0.1	100	1	2	4	14.5±1	4.5±1	38±3	0.8±0.05	
	C	±50	0.1	500								
	D	±100	0.1	2000								
	S	±200	0.1	10000								
RH2HV	B	±25	0.1	100	2	5	10	26.5±1	5.5±1	38±3	1±0.05	
	C	±50	0.1	500								
	D	±100	0.1	2000								
	S	±200	0.1	10000								
RH3HV	B	±25	1	500	3	10	20	42±2	5.5±1	38±3	1±0.05	
	C	±50	0.1	500								
	D	±100	0.1	2000								
	S	±200	0.1	10000								
RH4HV	B	±25	1	500	4	15	30	52±2	8.5±1	38±3	1±0.05	
	C	±50	0.1	500								
	D	±100	0.1	2000								
	S	±200	0.1	10000								
RH6HV	B	±25	1	500	6	20	40	77±2	8.5±1	38±3	1±0.05	
	C	±50	0.5	500								
	D	±100	0.5	2000								
	S	±200	0.1	10000								
RH8HV	B	±25	1	500	8	30	50	97±2	8.5±1	38±3	1±0.05	
	C	±50	1	500								
	D	±100	1	2000								
	S	±200	0.1	10000								
RH10HV	B	±25	1	500	10	35	60	117±3	8.5±1	38±3	1±0.05	
	C	±50	1	500								
	D	±100	1	2000								
	S	±200	0.1	10000								
RH12HV	B	±25	1	500	12	40	70	137±3	8.5±1	38±3	1±0.05	
	C	±50	1	500								
	D	±100	1	2000								
	S	±200	0.1	10000								
RH14HV	D	±100	1	2000	14	50	80	162±3	8.5±1	38±3	1±0.05	
	S	±200	0.1	10000								
RH16HV	D	±100	1	2000	16	60	90	190±3	8.5±1	38±3	1±0.05	
	S	±200	0.1	10000								

NOTICE: ① Resistance tolerance ±0.1%, ±0.25% resistor is producible at type RU series.

② The resistors to be used in insulation oil and other similar substances have the model number of SR instead of RH (RH4HV to RH16HV). (The Type SR resistors are provided with an oil feed hole.)

③ SSR type resistors (SSR2HV to SSR14HV) are recommended for molding application with resin.

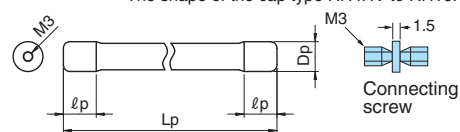
④ The size of SSR type resistors equal to each RH types.

※1 Also consult your local dealer for the availability of resistors with a temperature coefficient of "A" characteristic.

Cap Type

RH4HV~RH16HV

The shape of the cap type RH4HV to RH16HV.



Type	Dimensions (mm)		
	Lp	Dp	lp
RH4HVP	60±2	9.0±0.2	10±1
RH6HVP	85±2	9.0±0.2	10±1
RH8HVP	105±2	9.0±0.2	10±1
RH10HVP	125±2	9.0±0.2	10±1
RH12HVP	145±2	9.0±0.2	10±1
RH14HVP	170±2	9.0±0.2	10±1
RH16HVP	198±2	9.0±0.2	10±1