

## High Voltage Resistors

### Type HH Series

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The HH type resistors offers a very stable high voltage resistor in a compact package with excellent pulse withstand capability.

These are used mainly in physical and chemical measuring instruments, X-ray apparatus, electron microscopes and other high voltage industrial applications.

#### Key Features

- Low TCR's
- Low Resistance Tolerances
- Small compact size
- Up to 6 Watts Dissipation
- High Reliability
- Excellent long-term stability
- High resistance to pulse voltages
- High thermal shock resistance when mounted to PCB

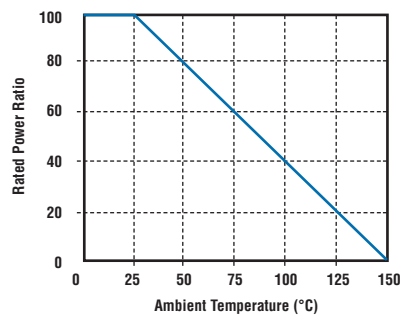
#### Characteristics - Electrical

Type	Power Rating @ 25°C (W)	Max. Working Voltage DC (kV)	Impulse Voltage (kV) 1.2 x 50 Microseconds	Resistance Range (Ohms)	Resistance Tolerance (%)	Temperature Coefficient (ppm)
HH55	0.5W	1.5	3.0	100K-50M	1.0, 2.0, 5.0, 10	±25
				100K-100M		±50
				100K-1G0		±100
HH60	1.0W	2.0	4.0	100K-100M	1.0, 2.0, 5.0, 10	±25
				100K-500M		±50
				100K-2G0		±100
HH65	2.0W	5.0	10.0	100K-100M	1.0, 2.0, 5.0, 10	±25
				100K-500M		±50
				100K-2G0		±100
HH70	3.0W	10.0	20.0	100K-100M	1.0, 2.0, 5.0, 10	±25
				100K-500M		±50
				100K-2G0		±100
HH80	4.0W	15.0	30.0	100K-500M	1.0, 2.0, 5.0, 10	±50
				100K-2G0		±100
HH120	6.0W	20.0	40.0	100K-500M	1.0, 2.0, 5.0, 10	±50
				100K-2G0		±100

#### Characteristics - Environmental

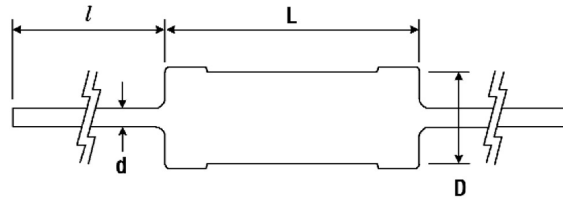
Test Item	Characteristics	Test Method
Operating Temperature Range:	-55°C to +150°C	
Short Term Overload:	$\Delta R \leq \pm 0.5\%$	Rated Voltage x 2.5 applied for 5 seconds
Resistance to Soldering Heat:	$\Delta R \leq \pm 0.2\%$	350°C for 3 seconds
Long Term Stability:	$\Delta R \leq \pm 0.5\%$	At normal temperature and humidity for 10,000 hours without load
Moisture Load Life:	$\Delta R \leq \pm 0.5\%$	40°C 90 ~ 95%RH for 1,000 hours
Load Life:	$\Delta R \leq \pm 0.5\%$	25°C Rated power x _ for 3,000 hours
Temperature Coefficient:	"D" ±25ppm	The test data is based on a temperature difference of 100°C (reference temperature 25°C; measurement temperature, 125°C)
	"C" ±50ppm	
	"Z" ±100ppm	

#### Derating Curve



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**Dimensions**



Style	D-mm	L-mm	d-mm	l-mm
HH55	4.5±1.0	13.0±1.0	0.8±0.05	38.0
HH60	4.5±1.0	14.5±1.0	0.8±0.05	38.0
HH65	5.5±1.0	26.5±1.0	1.0±0.05	38.0
HH70	5.5±1.0	42.0±1.0	1.0±0.05	38.0
HH80	8.5±1.0	52.0±1.0	1.0±0.05	38.0
HH120	8.5±1.0	77.0±1.0	1.0±0.05	38.0

**How to Order**

HH55	100K	F	D
<b>Common Part</b>	<b>Resistance Value</b>	<b>Tolerance</b>	<b>T.C.R.</b>
HH55 HH60 HH65 HH70 HH80 HH120	100K Ohm (100,000 Ohms) 100K  1 Meg Ohm (1,000,000 Ohms) 1M0	F - 1% G - 2% J - 5% K - 10%	D - ±25ppm  C - ±50ppm  Z - ±100ppm