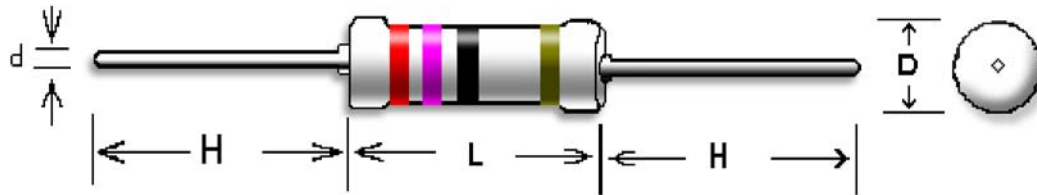


# HVR1500- High Voltage Resistor

## Features

Special conductive film withstands high voltage far over the maximum working voltage of general-purpose resistors. Suitable for high voltage application, such as TV, high voltage transformer circuit, high voltage detection, etc.



## Dimensions:

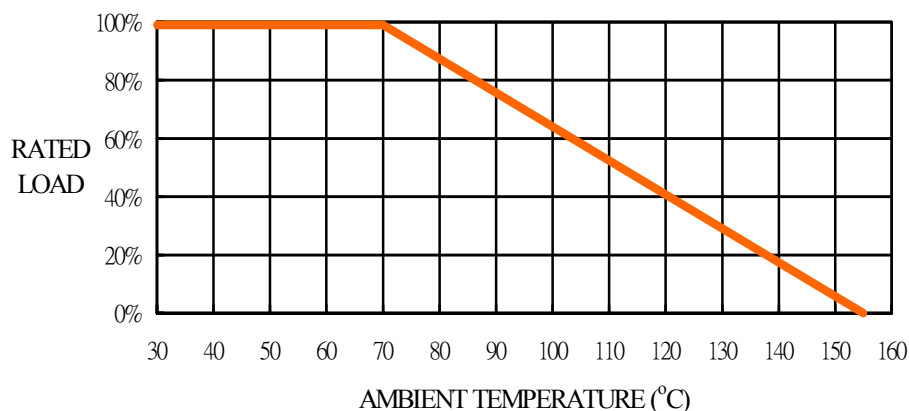
Type	Body Length (L, mm)	Body Diameter (D, mm)	Lead Wire Length (H, mm)	Lead Wire Diameter (d, mm)	Net Weight Per 1000 Pcs
HVR1500	76.0 ± 1.0	8 ± 0.5	40 ± 3.0	0.8 ± 0.03	9000 Grams

## General Specifications:

Type	Power Rating At 70 °C	Max. Working Voltage	Max. Overload Voltage	Min. Resistance	Max. Resistance	Resistance Tolerance	Standard Resistance Values
HVR1500	15W	45KV DC	60KV DC	100K	100M	± 5%	E-24
						± 1%	E-96

*Other sizes and values available on request.*

POWER DERATING CURVE



Jun. 28, 2004

# HVR1500- High Voltage Resistor

## Technical Summary:

Characteristics	Limits
Dielectric Withstanding Voltage, VAC or DC	1000
Temperature Coefficient, PPM / °C	±800
Operating Temperature Range, °C	-55 ~ +155
Insulation Resistance, MΩ	>10 <sup>4</sup>
Voltage Coefficient, PPM / V	<25

## Performance Specifications:

Tests Characteristics	Test Conditions	Limits
Short Time Over Load	IEC 60115-1 4.13 5 seconds 2.5x rated voltage (not over max. overload voltage)	± (1% + 0.05R)
Load Life In Humidity	IEC 60115-1 4.24 56 days at 40°C and 93% relative humidity	± 5%
Load Life 1,000 hours	IEC 60115-1 4.25.1 Rated load 1.5 hours ON, 0.5 hours OFF, at 70°C	± 5%
Resistance To Soldering Heat	IEC 60115-1 4.18 10 seconds at 260°C solder bath temperature	± (1% + 0.05R)
Solderability	MIL-STD-202 Method 208 Solder area covered after 230±5°C/5±0.5 seconds w/ flux applied	95% Min.
Vibration	MIL-STD-202 Method 204 Six hours in each parallel and axial direction w/ a simple harmonic motion having an amplitude of 1.52mm and 10 to 20,000 Hz.	± (1% + 0.05R)
Terminal Endurance	IEC 60115-1 4.25.3 1000 hours at 155°C without load	± (1% + 0.05R)
Thermal Shock	IEC 60115-1 4.19 -55°C 30minutes, +155°C 30minutes, 5 cycles	± (1% + 0.05R)
Surge Test	Surge voltage = $\sqrt{(100 \times P \times R)}$ DC <i>P is power rating, R is resistance value, surge voltage is not more than 80KV</i> Surge duration = 50ns Period = 1 sec Number of surges = 5000	5%

## Ordering Information

Type	Tolerance	Temperature Coefficient	Resistance Value	Packaging	Special Request (Optional)
HVR1500	J (5%)	TK800	100K	B	LV (Low value)

Jun. 28, 2004