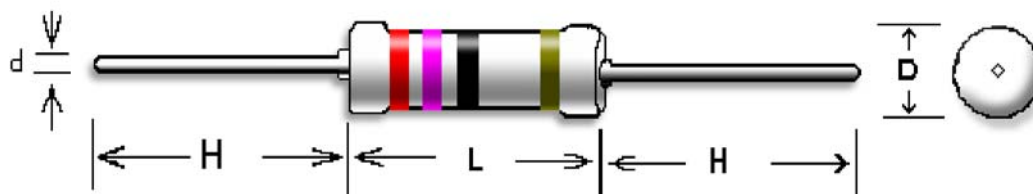


HVR- High Voltage Resistor

Features

- Special conductive film withstands high voltage
- Maximum working voltage far over that of general-purpose resistors
- Suitable for TV, high voltage power supply, high voltage detection, etc
- Complete series is VDE0860 (EN60065) approved under license number 40011593



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
HVR25	6.5 ± 1.0	2.6 ± 0.3	26 ± 3.0	0.55 ± 0.03	300 Grams
HVR50	8.8 ± 1.0	3.2 ± 0.2	28 ± 3.0	0.6 ± 0.03	340 Grams
HVR100	15.5 ± 1.0	5.5 ± 0.5	30 ± 3.0	0.8 ± 0.03	1200 Grams
HVR200	19.0 ± 1.0	6.0 ± 0.5	30 ± 3.0	0.8 ± 0.03	1620 Grams
HVR300	24.0 ± 1.0	8.0 ± 0.5	30 ± 3.0	0.8 ± 0.03	3100 Grams

General Specifications:

Type	Power Rating At 70 °C	Max. Working Voltage	Max. Overload Voltage	Min. Resistance	Max. Resistance	Resistance Tolerance	Standard Resistance Values
HVR25	1/4W	1.6KV DC 1150V RMS	3KV DC 2KV RMS	91 K	24 M	± 5%	E-24
						± 1%	E-96
HVR50	1/2W	3.5KV DC 2.5KV RMS	7KV DC 5KV RMS	100 K	33 M	± 5%	E-24
						± 1%	E-96
HVR100	1W	10KV DC 7KV RMS	20KV DC 14KV RMS	100K	68 M	± 5%	E-24
						± 1%	E-96
HVR200	2W	11KV DC 8KV RMS	20KV DC 15KV RMS	100 K	100 M	± 5%	E-24
						± 1%	E-96
HVR300	3W	12KV DC 8.5KV RMS	20KV DC 15KV RMS	100 K	100 M	± 5%	E-24
						± 1%	E-96

Other sizes and values available on request.

Jun. 28, 2004

HVR- High Voltage Resistor

Technical Summary:

Characteristics	Limits
Power Derating, Linear	100% @ <+70°C, 0% @ +155°C
Dielectric Withstanding Voltage, VAC or DC	HVR25: 500
	HVR50, HVR100: 700
	HVR200: 800
	HVR300: 1000
Temperature Coefficient, PPM / °C	±200
Operating Temperature Range, °C	-55 ~ +155
Insulation Resistance, M	>10 ⁴
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	IEC 60115-1 4.22 Six hours in each parallel and axial direction w/ a simple harmonic motion having an amplitude of 0.75mm and 10 to 500 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 listed at right.</i> Surge duration = 50ns Period = 1 sec Number of surges = 5000	HVR25: 10KV
		HVR50: 30KV
		HVR100: 40KV
		HVR200: 40KV
		HVR300: 40KV

Ordering Information

Type	Tolerance	Resistance Value	Packaging	Special Request (Optional)
HVR100 HVR200	F (1%) J (5%)	10M	TB (Tape/Box)	AS (Anti-surge)

Jun. 28, 2004