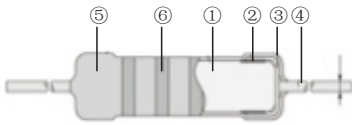


The HVX/HVY Series of fixed ceramic resistors are ideal for circuitry associated with surges, high peak power or high energy. They offer enhanced performance in high voltage power supplies, R-C snubber circuits, and inrush limiters. The HVX/HVY resistors can often replace carbon composition resistors which can be difficult to source.

● Features

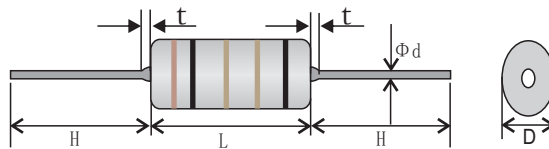
- I Replaces 1 and 2 watt carbon composition resistors.
- II Meets high energy density demands .
- III High peak power.
- IV 10% Tolerance.

● Construction



①	Resistive body	④	Lead wire
②	Inner electrode	⑤	Coating
③	Electrode cap	⑥	Marking

● Dimensions



Type	Power	Dimensions(mm)				
		L ± 1.0	D ± 1.0	d ± 0.05	H ± 3	t Max
HVX	1W	16.5	5.5	0.8	38	1.5
HVY	2W	19.0	6.5	0.8	38	1.5

● Applications And Ratings

Type	Power	Resistance range(Ω)	Joules max.*	Max. working volts	Dielectric Strength	Max Overload Voltage	Max Pulse Voltage1
HVX	1W	3.3Ω-100K	50	300	500	600	14K
HVY	2W	3.3Ω-1M	80	400	700	800	20K

● Ordering Information

Example: HVX 01 K TR R100
 (1) (2) (3) (4) (5)
 Series Name Power Rating Resistance Tolerance Packaging Resistance

(1)Type: HVX/HVY SERIES

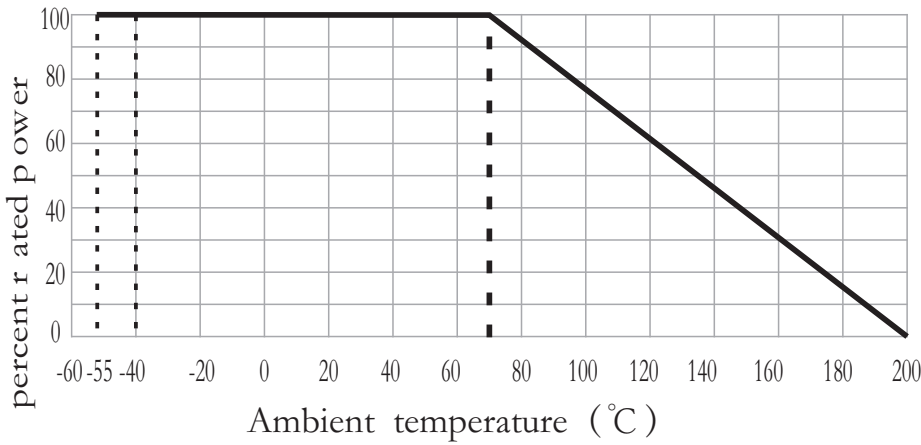
(2)Power Rating: 01=1W,02=2W

(3)Tolerance:K= ± 10%

(4)Packaging :TR = tape & reel、 B = bulk

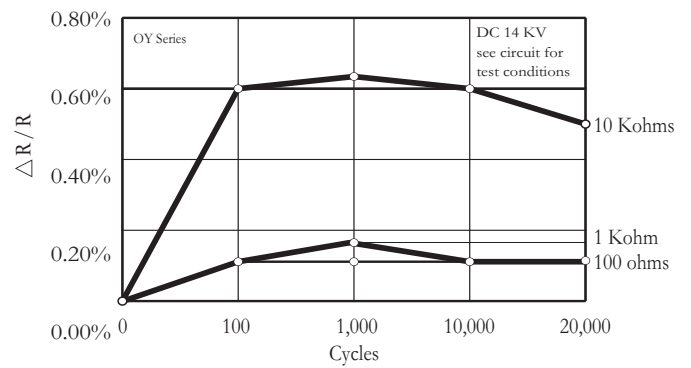
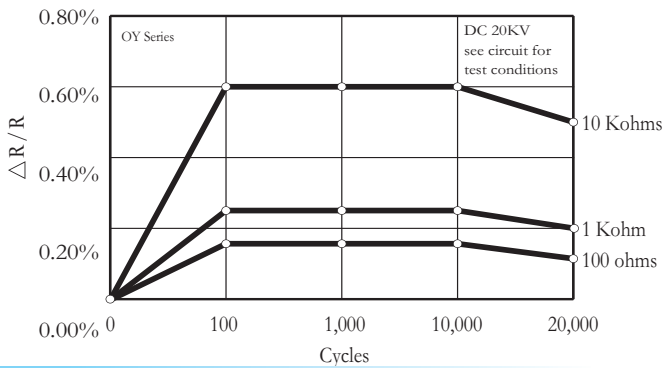
(5)Resistance Value:R100=0.1R、 1R00=1Ω、 10R0=10Ω、 100R0=100Ω

Derating Curve

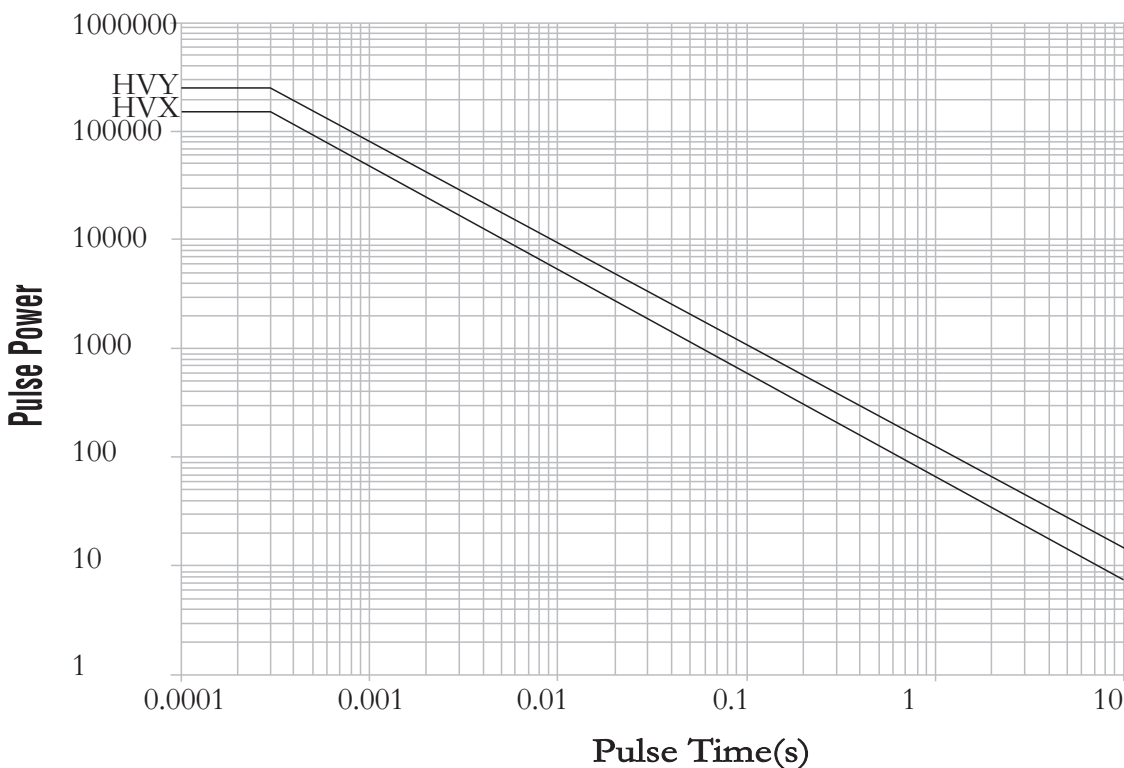


For resistors operated at an ambient temperature of 70°C or above, the power rating should be derated in accordance with the above derating curve.

Resistance to Pulse



Pulse Limiting Power(Po) One Pulse



● Performance

Test Items	Test Condition	Maximum ΔR
Life Test	MIL-STD-202, Method 108	± 5%
Short Time Overload	2x rated V, 5 sec ON @ 70° C	± (2% + 0.05Ω)
Resistance to Pulse ¹	20,000 cycles. See circuit for test conditions	± 5%
Thermal Shock	MIL-STD-202, Method 107	± (2% ± 0.05Ω)
Moisture Resistance	1000 hrs @ 40°C, 90 - 95% RH	± 5%
Terminals	Pb-free solder-coated axial	
Coating	Silicone ceramic	
Derating	Linear from 100% @ +70°C to 0% @ +200°C	
Operating Temp. Range	-40°C to +220°C	
Tolerance	± 10% standard	
Power Rating	Based on 70°C free air rating	
Temperature Coefficient	-1300 ± 300ppm/° C.	
Pulse Tolerance, 100 pulses	HVX: 1240V @ 52μF, 40J/ 35 sec.	
	HVY: 1640V @ 52μF, 70J/35 sec.	
	<p>¹See figures: 14KV and 20KV values used in circuit as shown; full voltage not applied directly to resistor.</p> 