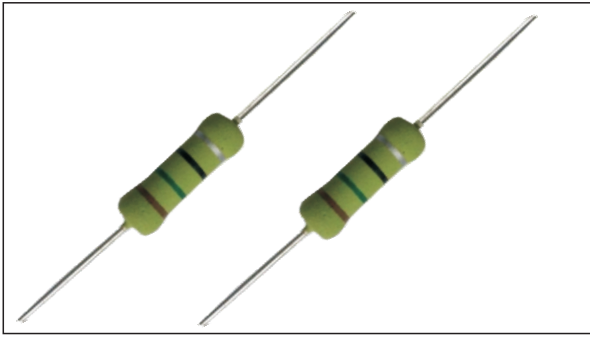


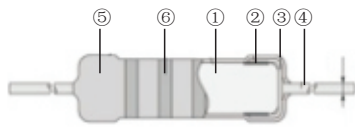


The HVX/HVY Series of fixed ceramic resistors are ideal for circuitry associated with surges, high peak power or high energy. They offer enhanced performance in high voltage power supplies, R-C snubber circuits, and inrush limiters. The HVX/HVY resistors can often replace carbon composition resistors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

● Features

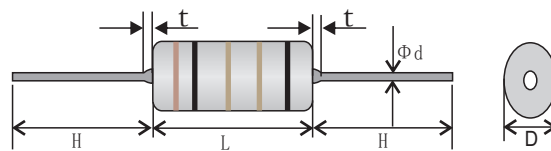
- I Replaces 1 and 2 watt carbon composition resistors.
- II Meets high energy density demands .
- III High peak power.
- IV 10% Tolerance.

● Construction



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

● Dimensions



Type	Power	Dimensions(mm)				
		$L \pm 1.0$	$D \pm 1.0$	$d \pm 0.05$	$H \pm 3$	t Max
HVX	1W	16.5	5.5	0.8	38	1.5
HVY	2W	19.0	7.0	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 Voltage ¹
HVX	1W	3.3 Ω -100K	50	300	500	600	14K
HVY	2W	3.3 Ω -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

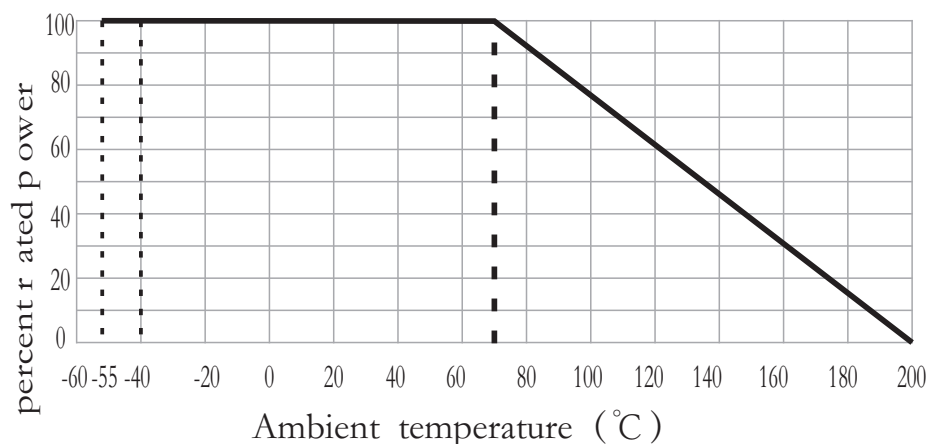
(2)Power Rating: 01=1W,02=2W

(3)Tolerance:K= $\pm 10\%$

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

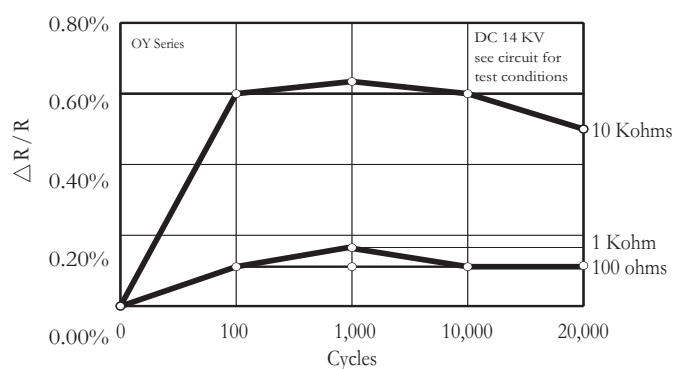
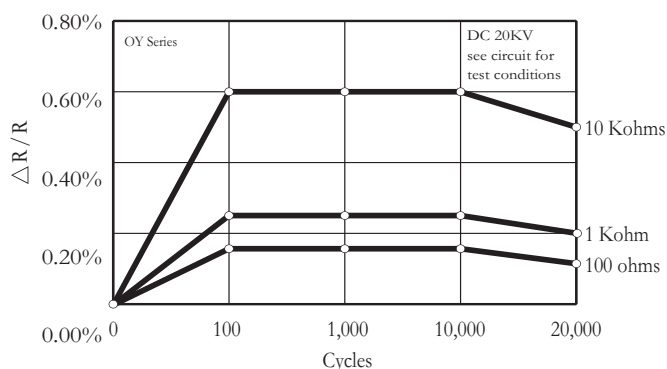
(5)Resistance Value:R100=0.1R、 1R00=1 Ω 、 10R0=10 Ω 、 100R0=100 Ω

Derating Curve

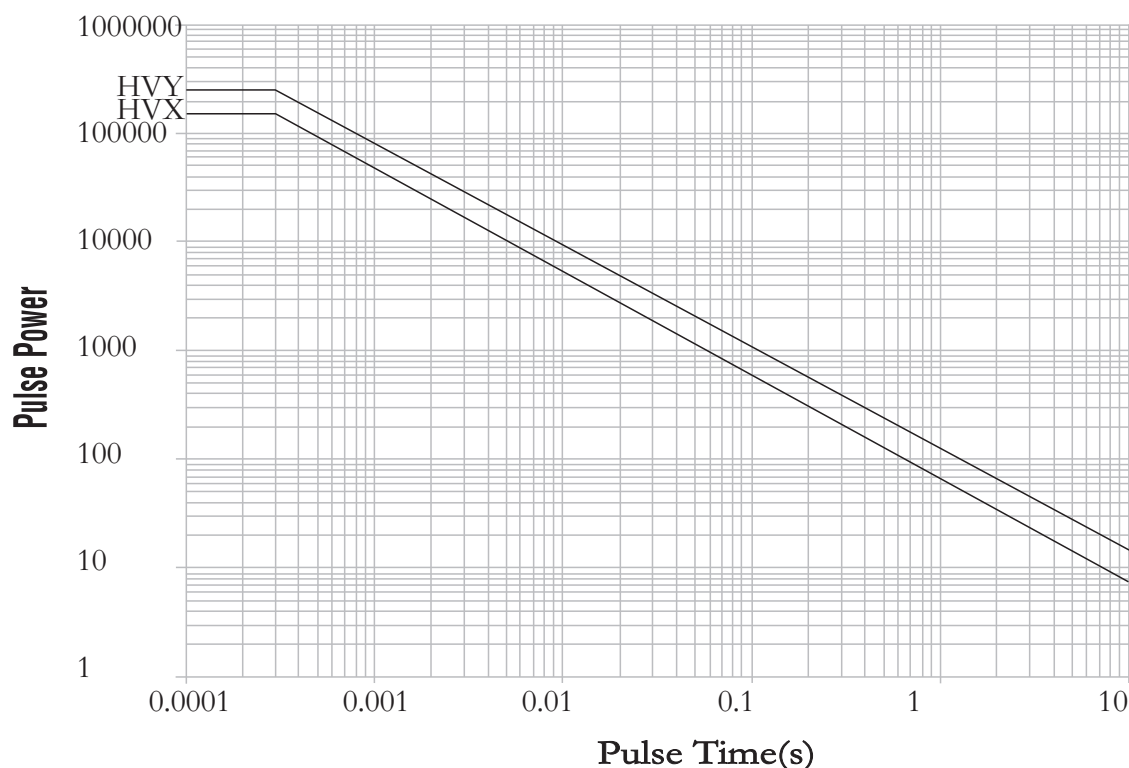


For resistors operated at an ambient temperature of 70°C or above, the power rating should be derated in accordance with the above derating curve.

Resistance to Pulse



Pulse Limiting Power(Po) One Pulse



● Performance

Test Items	Test Condition	Maximum ΔR
Life Test	MIL-STD-202, Method 108	$\pm 5\%$
Short Time Overload	2x rated V, 5 sec ON @ 70° C	$\pm (2\% + 0.05\Omega)$
Resistance to Pulse ¹	20,000 cycles. See circuit for test conditions	$\pm 5\%$
Thermal Shock	MIL-STD-202, Method 107	$\pm (2\% \pm 0.05\Omega)$
Moisture Resistance	1000 hrs @ 40°C, 90 - 95% RH	$\pm 5\%$
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	$\pm 10\%$ standard	
Power Rating	Based on 70°C free air rating	
Temperature Coefficient	-1300 $\pm$ 300ppm/° C.	
Pulse Tolerance, 100 pulses	HVX: 1240V @ 52 μ F, 40J / 35 sec.	
	HVY: 1640V @ 52 μ F, 70J / 35 sec.	
	¹See figures: 14KV and 20KV values used in circuit as shown; full voltage not applied directly to resistor. 