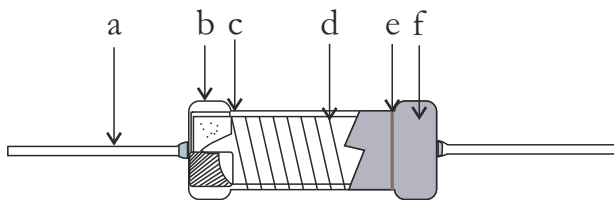


## Features

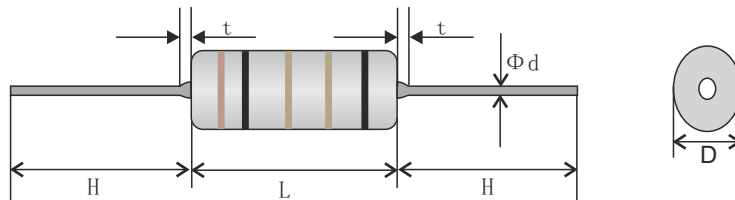
- I Flameproof and insulating coating designed to assure safe usage by special non-flammable silicon-base. (Eqyuvakebt to UL94V-0).
- II Good heat-durability, low temperature coefficient, low noise, high overload power.
- III Stable long service life.
- IV Products meet Eu-RoHS.
- V Response to pulsed high voltage circuit, with excellent performance.

## Construction



a	Lead wire
b	Cap
c	Ceramic base
d	Wire wound
e	Marking or color code
f	Insulation coat

## Dimensions, Applications And Ratings

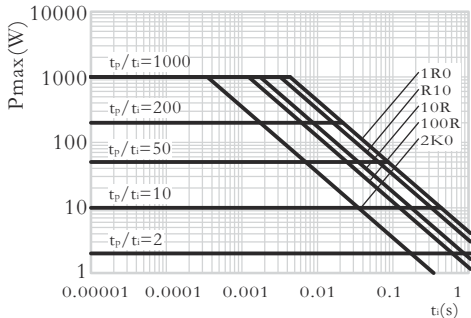


Type	Power	Resistance Range ( $\Omega$ )	Dimensions(mm)					Max working Voltage	Dielectric with standing	Pulse with standing voltage	T.C.R
			L $\pm$ 1	t max	D $\pm$ 0.5	H $\pm$ 3	d $\pm$ 0.05				
HVS14	1/4W	0.1~2K $\Omega$	6.5	1.5	2.5	28.0	0.60	$\sqrt{PR}$	300V	2KV	$\geq 10\Omega$ $\pm 100PPM/^{\circ}C$
HVS12	1/2W	0.1~3K $\Omega$	9.0	1.0	3.5	28.0	0.60	$\sqrt{PR}$	350V	3KV	
HVS01	1W	0.1~5K $\Omega$	11.0	2.5	4.0	28.0	0.70	$\sqrt{PR}$	500V	3KV	
HVS02	2W	0.1~8K $\Omega$	15.0	2.5	5.0	28.0	0.70	$\sqrt{PR}$	500V	4KV	$1\Omega \sim 9.9\Omega$ $\pm 150PPM/^{\circ}C$
HVS03	3W	0.1~8K $\Omega$	15.0	2.5	5.0	28.0	0.70	$\sqrt{PR}$	700V	5KV	
HVS04	4W	0.1~10K $\Omega$	17.0	2.5	6.0	28.0	0.70	$\sqrt{PR}$	700V	6KV	$0.1\Omega \sim 0.99\Omega$ $\pm 200PPM/^{\circ}C$
HVS05	5W	0.1~10K $\Omega$	17.0	2.5	6.0	30.0	0.75	$\sqrt{PR}$	700V	6KV	
HVS06	6W	0.1~10K $\Omega$	19.0	2.5	6.0	33.0	0.75	$\sqrt{PR}$	700V	7KV	
HVS07	7W	0.1~15K $\Omega$	22.0	2.5	7.0	33.0	0.75	$\sqrt{PR}$	700V	8KV	$0.05\Omega \sim 0.099\Omega$ $\pm 350PPM/^{\circ}C$
HVS08	8W	0.1~15K $\Omega$	24.0	2.5	8.0	33.0	0.75	$\sqrt{PR}$	700V	10KV	
HVS09	9W	0.1~15K $\Omega$	32.0	2.5	8.0	33.0	0.75	$\sqrt{PR}$	700V	10KV	$0.01\Omega \sim 0.049\Omega$ $\pm 600PPM/^{\circ}C$
HVS10	10W	0.1~30K $\Omega$	36.0	2.5	8.5	33.0	0.75	$\sqrt{PR}$	700V	12KV	
HVS12	12W	0.1~30K $\Omega$	42.0	2.5	9.0	33.0	0.80	$\sqrt{PR}$	700V	12KV	
HVS15	15W	0.1~40K $\Omega$	52.0	3.0	9.0	33.0	0.80	$\sqrt{PR}$	700V	15KV	
HVS18	18W	0.1~40K $\Omega$	62.0	3.0	9.0	33.0	0.80	$\sqrt{PR}$	700V	15KV	
HVS20	20W	0.1~40K $\Omega$	66.0	3.0	9.0	33.0	0.80	$\sqrt{PR}$	700V	20KV	
HVS25	25W	0.1~50K $\Omega$	76.0	3.0	9.0	33.0	0.80	$\sqrt{PR}$	700V	20KV	
HVS30	30W	0.1~100K $\Omega$	95.0	3.0	12.0	33.0	1.0	$\sqrt{PR}$	700V	25KV	
HVS35	35W	0.1~100K $\Omega$	95.0	3.0	12.0	33.0	1.0	$\sqrt{PR}$	700V	25KV	
HVS40	40W	0.1~100K $\Omega$	112.0	3.0	12.0	33.0	1.0	$\sqrt{PR}$	700V	30KV	

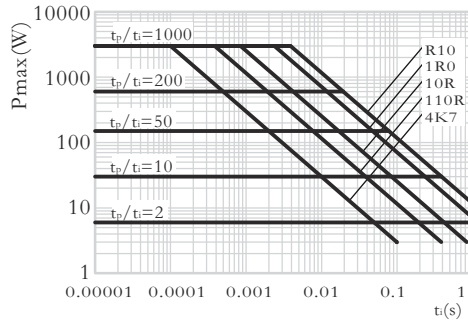
Note: Special products please contact with kw@kwxcom.com

## Pulse Voltage Overload Test

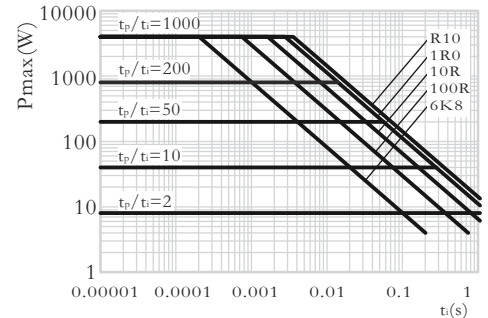
### I PULSE DIAGRAMS



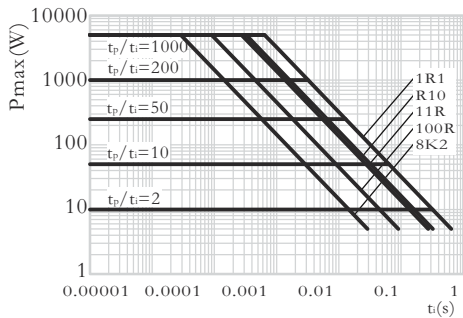
HVS01 Pulse on a regular basis; maximum permissible peak pulse power ( $\dot{P}_{max}$ ) as a function of pulse duration ( $t_i$ )



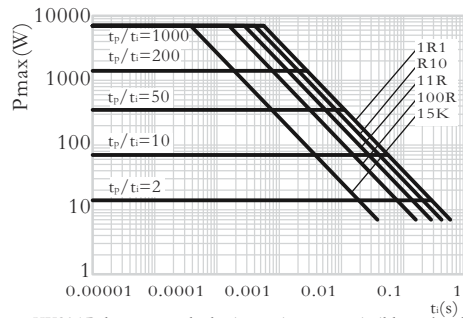
HVS02 Pulse on a regular basis; maximum permissible peak pulse power ( $\dot{P}_{max}$ ) as a function of pulse duration ( $t_i$ )



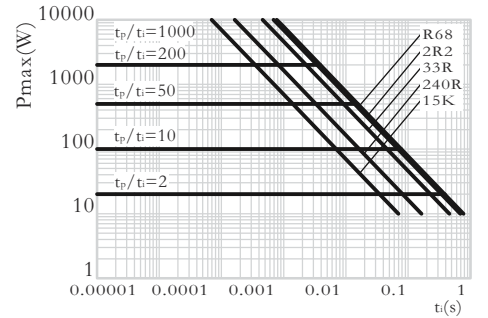
HVS03 Pulse on a regular basis; maximum permissible peak pulse power ( $\dot{P}_{max}$ ) as a function of pulse duration ( $t_i$ )



HVS04 Pulse on a regular basis; maximum permissible peak pulse power ( $\dot{P}_{max}$ ) as a function of pulse duration ( $t_i$ )

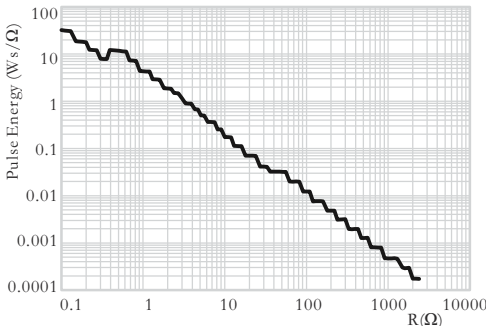


HVS06 Pulse on a regular basis; maximum permissible peak pulse power ( $\dot{P}_{max}$ ) as a function of pulse duration ( $t_i$ )

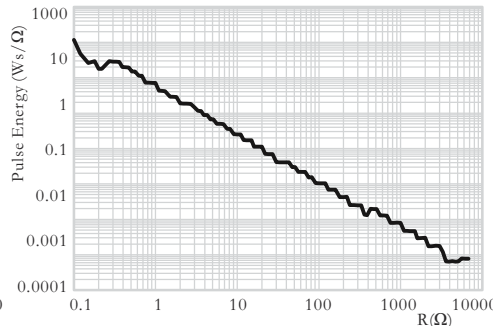


HVS09 Pulse on a regular basis; maximum permissible peak pulse power ( $\dot{P}_{max}$ ) as a function of pulse duration ( $t_i$ )

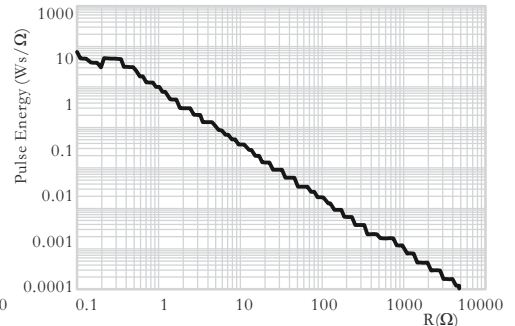
### II PULSE DIAGRAMS



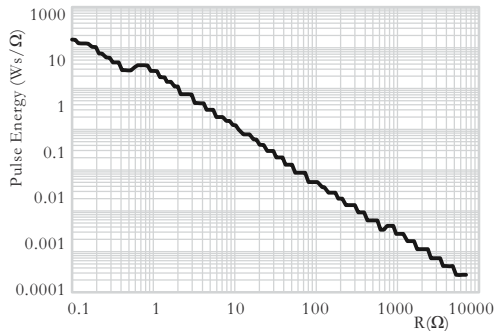
HVS01 Pulse capability; E (Ws) as a function of R ( $\Omega$ )



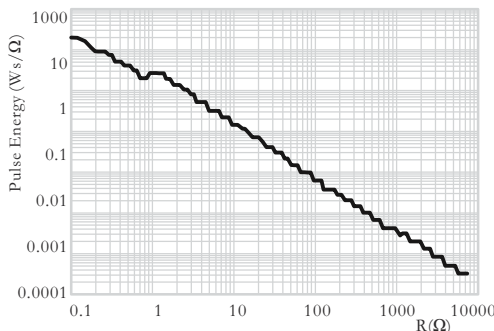
HVS02 Pulse capability; E (Ws) as a function of R ( $\Omega$ )



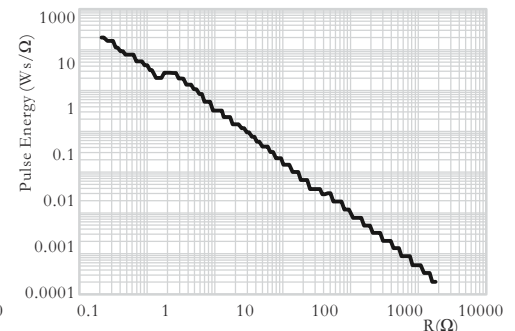
HVS03 Pulse capability; E (Ws) as a function of R ( $\Omega$ )



HVS04 Pulse capability; E (Ws) as a function of R ( $\Omega$ )



HVS06 Pulse capability; E (Ws) as a function of R ( $\Omega$ )



HVS09 Pulse capability; E (Ws) as a function of R ( $\Omega$ )

\* Please consult us for more pulse power

## Ordering Information

Example:

HVS	14	J	R100
(1)	(2)	(3)	(4)
Series Name	Power Rating	Resistance Tolerance	Resistance

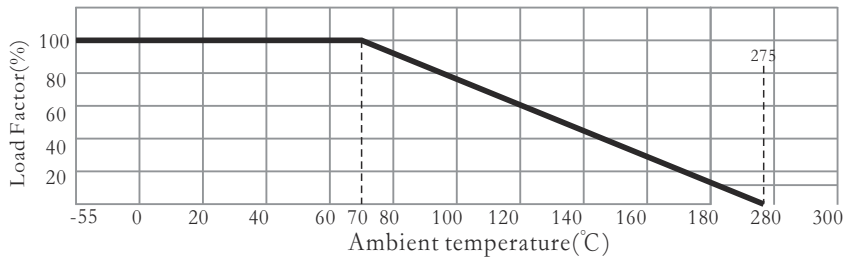
(1)Type:HVS SERIES

(2)Power Rating: 14=1/4W、12=1/2W、1=1W、2=2W、3=3W

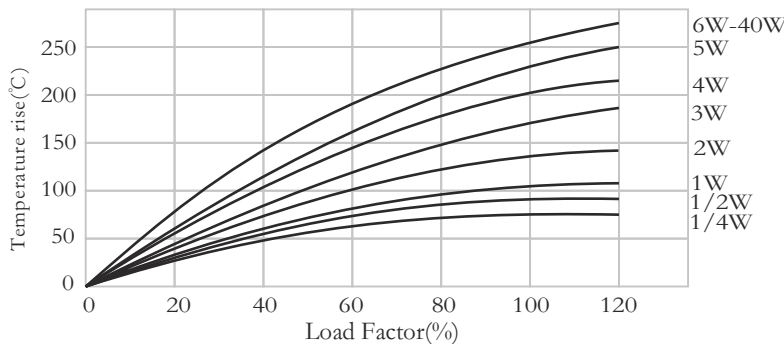
(3)Tolerance: J=±5%

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

## Derating Curve



## Surface Temperature Rise



## Performance

Test Items	Performance Requirements	Test Methods(JIS C 5201-1)
Resistance	Within specified tolerance	Measuring points are 10mm from the end cap
T.C.R.	Within specified T.C.R	Room temperature+100°C
Short time overload	±( 2%R+0.1Ω)	6.25 times the rated power for 5 seconds
Load life	±( 5%R+0.1Ω)	Rated voltage at 70°C for 1,000 hours 1.5hr ON/0.5hr OFF Cycles
Load life in humidity	±( 5%R+0.1Ω)	Rated voltage at 40°C ,95%RH for 1,000 hours
Moisture resistance	±( 2%R+0.1Ω)	40°C ,95%RH for 240 hours
Temperature cycle	±( 2%R+0.1Ω)	5 cycles for -25°C (30min);room temp.(30min) ~+85°C (30min)room temp.(30min)
Resistance to soldering heat	±( 2%R+0.1Ω)	260°C ± 5°C for 10 seconds 350°C ± 10°C for 3.5 seconds
Insulation resistance	> 1,000MΩ	500V insulation test 1min.
Pules withstanding voltage	± 5% 	The following discharge cycle is repeated in the circuit of the left fig. 1 sec ON,1 sec OFF, 10,000 cycles. Test voltage: DC 10KV