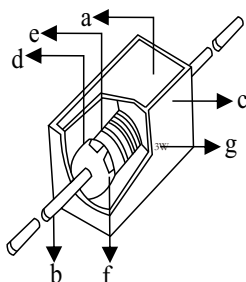


● Features

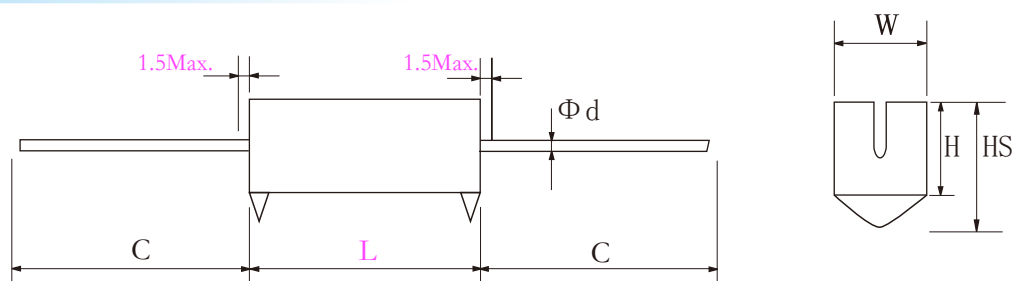
- I Compact type with safety design of non-flammability and insulation
- II Stable long life
- III Products meet Eu-RoHS

● Construction



a	SiO ₂ material
b	Tinned copper lead wire
c	Ceramic shell
d	Resistor core
e	Wire-wound or metal oxide film
f	Tinned iron cap
g	Marking

● Dimensions



Type	Power	Dimensions(mm)					
		L±1.0	W±0.5	H±1.0	HS±1.0	C±3	d±0.05
SQA	3W	22.0	8.0	8.0	9.5	33.0	0.70
	5W	22.0	9.5	9.5	11.0	33.0	0.70
	5WF	25.0	6.00	7.00	10.5	33.0	0.70
	7W	35.0	9.50	9.50	11.0	33.0	0.70
	10W	48.0	9.50	9.50	12.7	33.0	0.70
	15W	48.0	12.5	12.5	15.9	33.0	0.75
	20W	63.0	12.5	12.5	15.9	33.0	0.80
	22W	63.0	12.5	12.5	15.9	33.0	0.80
	25W	63.0	12.5	12.5	15.9	33.0	0.80
	25WS	60.0	14.0	14.0	17.5	33.0	0.80

● Reference Standards

MIL-STD202

Ordering Information

Example:

SQA (1)	3 (2)	J (3)	R100 (4)	A (5)
Series Name	Power Rating	Resistance Tolerance	Resistance	Special code

(1)Type: SQA SERIES

(2)Power Rating: 3=3W、5=5W、7=7W、10=10W.....25W=25W

(3)Tolerance: F= ± 1%、G= ± 2%、J= ± 5%

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

(5)Special code: A:wirewound type ceramic core; B:Metal oxide film type; C:wirewound type glass core;

D:non-inductive type

To meet your request :

We also provide products for below functions.

I Mini size design

II Non-inductive products

III Anti-pulse high voltage products

IV Design resistor for High stability and reliable military supplies and industrial products .

More details please contact with our engineer. kwx@kwxcom.com

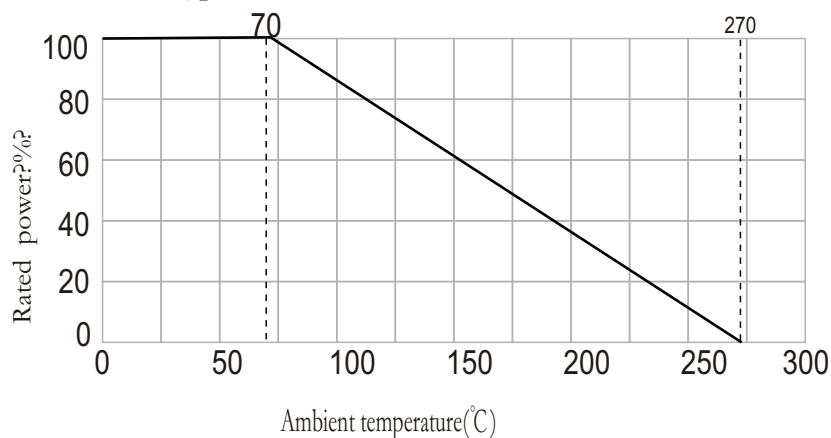
Applications And Ratings

Rated Power(W)	Resistance Range(Ω)		Max Working Voltage	Max Overload Voltage	Dielectric Withstanding Voltage	T.C.R
	Metal oxide film type	Wire wound type				
3W	100~39K	0.01~20K	350V	1000V	1500V _{AC}	Metal oxide film ± 350PPM/°C Wirewound type >10Ω± 20PPM/°C 1Ω~10Ω: ± 50PPM/°C Other TCR values available upon request
5W	100~50K	0.01~50K	350V	1000V		
7W	100~100K	0.05~50K	500V	1500V		
10W	100~100K	0.1~50K	750V	1500V		
15W	100~39K	0.1~50K	750V	1000V		
20W	100~50K	0.1~50K	750V	1000V		
22W	100~100K	0.1~50K	750V	1500V		
25W	100~100K	0.1~50K	750V	1500V		
25WS	100~100K	0.1~75K	750V	1500V		

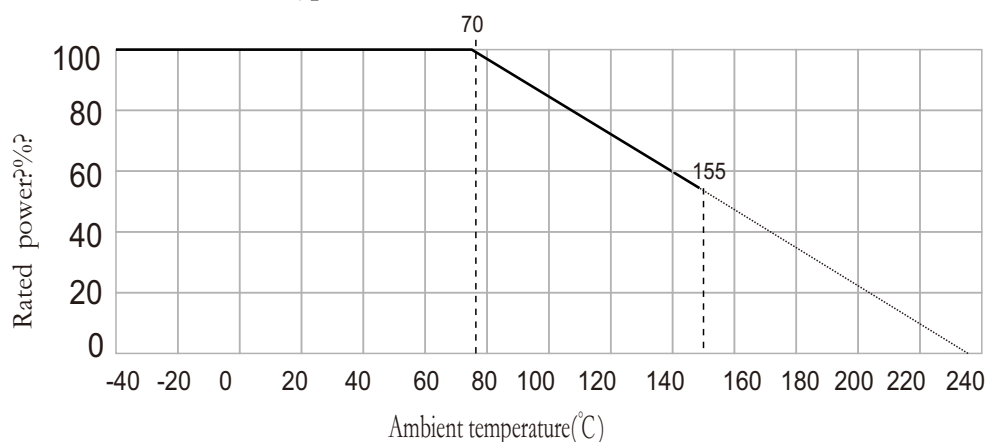
Derating Curve

Example

Wirewound type ceramic core



Metal oxide film type



Performance

Test Items	Performance Requirements	Test Methods(MIL-STD202)
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	$\pm (0.2\%R+0.05\Omega)$	10 times the rated power for 5 seconds
Load life	$\pm (1\%R+0.05\Omega)$	Rated voltage at 70 °C for 1,000 hours 1.5hr ON/0.5hr OFF Cycles
Load life in humidity	$\pm (1\%R+0.05\Omega)$	Rated voltage at 40°C,95%RH for 1,000 hours
Temperature cycle	$\pm (1\%R+0.05\Omega)$	5 cycles for -25°C (30min);room temp. (30min) ~+85°C (30min)room temp. (30min)
Resistance to soldering heat	$\pm (1\%R+0.05\Omega)$	260°C \pm 5°C for 10 seconds 350°C \pm 10°C for 3.5 seconds
Insulation resistance	> 100M Ω	500V insulation test 1min.