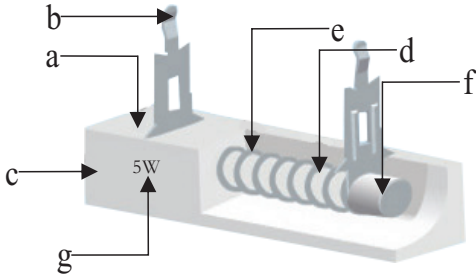


## ● Features

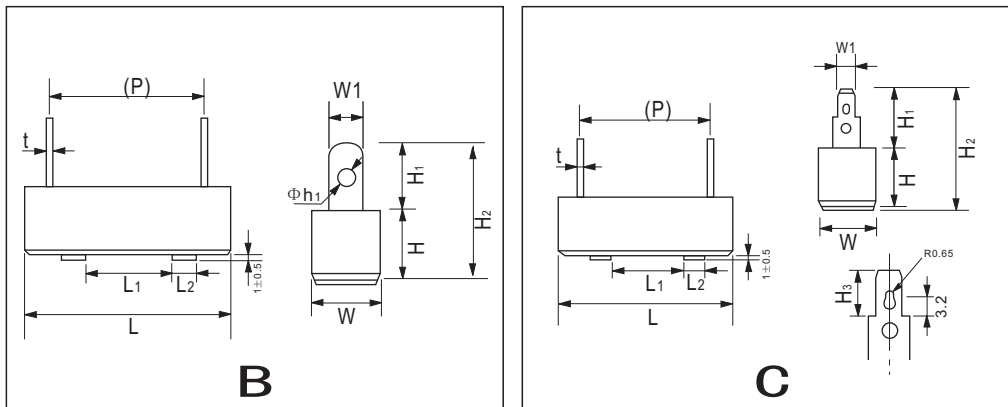
- I Compact type with safety design of non-flammability and insulation
- II Stable long life
- III Products meet Eu-RoHS

## ● Construction



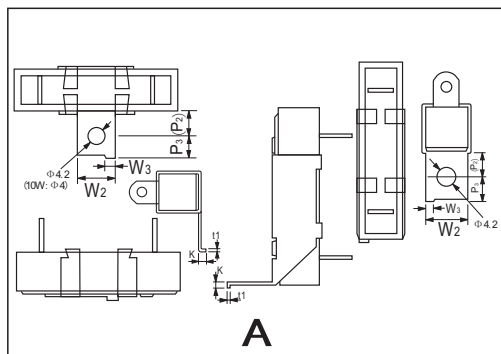
a	SiO <sub>2</sub> material
b	Iron plate
c	Ceramic shell
d	Glass core or ceramic core
e	Wire-wound or metal oxide film
f	Tinned iron cap
g	Marking

## ● Dimensions



Type	Power	Dimensions(mm)											
		L	L1	L2	W	W1	H	H1	H2	H3	(P)	t	Φh <sub>1</sub>
SQH MQH GQH	10W	48.0±1.5	25.0±1.0	4.5±0.5	9.5±1.0	5±0.5	9.5±1.0	6.0 <sup>+2</sup> <sub>0</sub>	16.5 <sup>+2</sup> <sub>-1</sub>	-	35±2.0	0.4±0.3	2.0±0.3
	15W	48.0±1.5	25.0±1.0	7.0±0.5	12.5±1.2	6±0.5	12.5±1.2	7.5 <sup>+2</sup> <sub>0</sub>	21.0 <sup>+2</sup> <sub>-1</sub>	-	32.5±2.0	0.5±0.3	2.5±0.3
	20W	63.5±2.0	25.0±1.0	7.0±0.5	12.5±1.2	6±0.5	12.5±1.2	7.5 <sup>+2</sup> <sub>0</sub>	21.0 <sup>+2</sup> <sub>-1</sub>	-	47.5±2.0	0.5±0.3	2.5±0.3
	25W	63.5±2.0	40.0±1.2	10.0±0.5	19.0±1.5	7.5±0.5	19.0±1.5	10.0 <sup>+2</sup> <sub>0</sub>	30.0 <sup>+2.5</sup> <sub>-1.5</sub>	-	47.5±2.0	0.5±0.3	2.5±0.3
	30W	75.0±2.5	40.0±1.2	9.50±0.5	19.0±1.5	7.5±0.5	19.0±1.5	9.0 <sup>+2</sup> <sub>-1</sub>	28.0 <sup>+2.5</sup> <sub>-1.5</sub>	-	52±2.0	0.5±0.3	3.0±0.3
	40W	90.0±2.5	40.0±1.2	9.50±0.5	19.0±1.5	7.5±0.5	19.0±1.5	9.0 <sup>+2</sup> <sub>-1</sub>	28.0 <sup>+2.5</sup> <sub>-1.5</sub>	-	67±2.0	0.5±0.3	3.0±0.3
	50W	90.0±2.5	40.0±1.2	9.50±0.5	19.0±1.5	7.5±0.5	19.0±1.5	9.0 <sup>+2</sup> <sub>-1</sub>	28.0 <sup>+2.5</sup> <sub>-1.5</sub>	-	67±2.0	0.5±0.3	3.0±0.3
	60W	90.0±2.5	40.0±1.2	9.50±0.5	19.0±1.5	7.5±0.5	19.0±1.5	9.0 <sup>+2</sup> <sub>-1</sub>	28.0 <sup>+2.5</sup> <sub>-1.5</sub>	-	67±2.0	0.5±0.3	3.0±0.3

We can make the terminal with many different shapes , more details please email to our engineer, kh@kxcom.com.



Type	Power	Dimensions(mm)					
		(P <sub>2</sub> )	P <sub>3</sub>	W <sub>2</sub>	W <sub>3</sub>	K	t <sub>1</sub>
SQH MQH GQH	10W	8.0±1.0	6.0±1.0	12.0±0.5	3.0±0.3	2.8±0.3	0.6±0.3
	15W	8.0±1.0	6.0±1.0	12.0±0.5	3.0±0.3	2.8±0.3	0.8±0.3
	20W	8.0±1.0	6.0±1.0	12.0±0.5	3.0±0.3	2.8±0.3	0.8±0.3
	25W	8.0±1.0	6.0±1.0	12.0±0.5	3.0±0.3	2.8±0.3	0.8±0.3
	30W	10.0±1.0	8.0±1.0	17.0±0.5	3.0±0.3	4.3±0.3	0.8±0.3
	40W	10.0±1.0	8.0±1.0	17.0±0.5	3.0±0.3	4.3±0.3	0.8±0.3
	50W	10.0±1.0	8.0±1.0	17.0±0.5	3.0±0.3	4.3±0.3	0.8±0.3
	60W	10.0±1.0	8.0±1.0	17.0±0.5	3.0±0.3	4.3±0.3	0.8±0.3

## Ordering Information

Example:

SQH	10	J	R100	A
(1)	(2)	(3)	(4)	(5)
Series Name	Power Rating	Resistance Tolerance	Resistance	Special code

(1)Type: SQH SERIES

(2)Power Rating: 10=10W、15=15W、20=20W、25=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, for SQH , MQH , GQH etc.

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 .

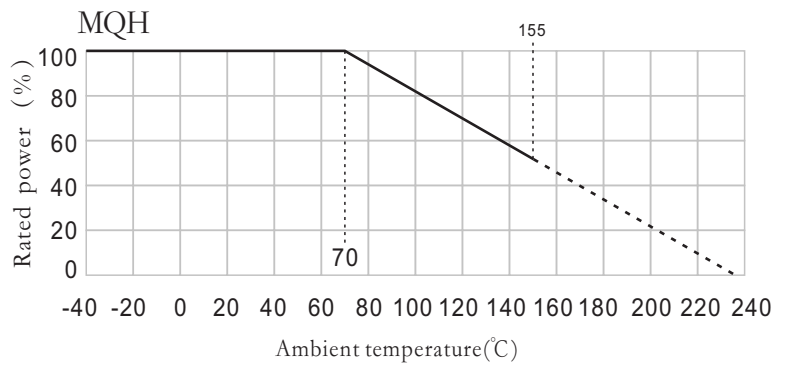
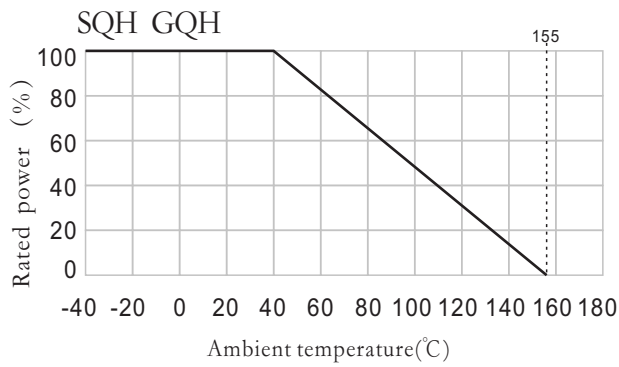
More details please contact with our engineer. [kh@khxcom.com](mailto:kh@khxcom.com)

## Applications And Ratings

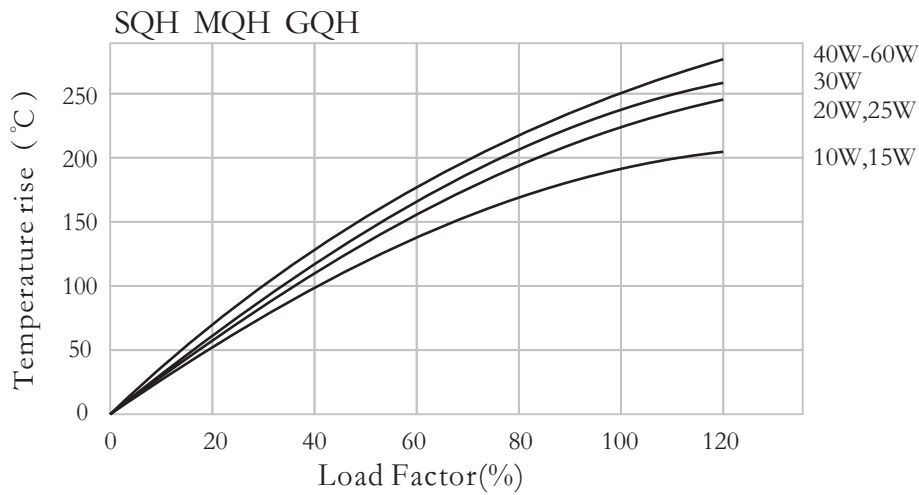
Rated Power(W)	Resistance Range(Ω)		Max Working Voltage	Max Overload Voltage	Dielectric Withstanding Voltage	T.C.R
	Metal oxide film type	Wire wound type				
10	100~39K	0.01~3K	350V	1000V	1000V	Metal oxide film MQZ ±350PPM/°C Wirewound SQZ GQZ ±100PPM/°C
15	100~50K	0.01~10K	350V	1000V		
20	100~100K	0.05~20K	500V	1500V		
25	100~100K	0.1~20K	750V	1500V		
30	100~100K	0.1~20K	1000V	1500V		
40	100~100K	0.1~20K	1000V	1500V		
50	100~100K	0.1~20K	1000V	1500V		
60	100~100K	0.1~20K	1000V	1500V		

## Derating Curve

Example



## 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	$\pm (1\%+0.05\Omega)$	10 times the rated power for 5 seconds
Load life	$\pm (5\%+0.1\Omega)$	Rated voltage at 70°C for 1,000 hours 1.5hr ON/0.5hr OFF Cycles
Load life in humidity	$\pm (5\%+0.1\Omega)$	Rated voltage at 40°C ,95%RH for 1,000 hours
Temperature cycle	$\pm (1\%+0.05\Omega)$	5 cycles for -25°C (30min);room temp. (30min) ~+85°C (30min)room temp. (30min)
Resistance to soldering heat	$\pm (1\%+0.05\Omega)$	260°C $\pm$ 5°C for 10 seconds 350°C $\pm$ 10°C for 3.5 seconds
Insulation resistance	> 100M $\Omega$	500V insulation test 1min.