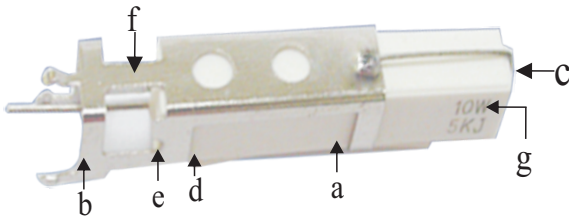


## ● Features

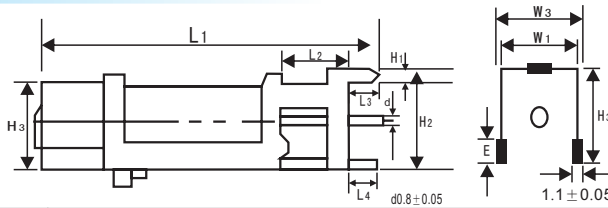
- I Good heat-durability,  
low temperature coefficient,  
low noise, high overload power
- II Use environment temperature:  
-55°C ~ +155°C

## ● 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)										Resistance Range(Ω)	
		L1	L2	L3	L4	H1	H2	H3	W1	E	W3	Core wrap	Oxide core
SQS5W	5W	31	5	4	6	1.5	11	9.5	10	1.5	10.5	0.1Ω~680Ω	0.1Ω~680Ω
SQS7W	7W	49	10	4	6	1.5	11	9.5	10	1.5	10.5	0.1Ω~1.5KΩ	0.1Ω~1.5KΩ
SQS10W	10W	62	10	4	6	1.5	11	9.5	10	1.5	10.5	0.51Ω~2KΩ	0.51Ω~2KΩ
SQS15W	15W	62.5	10	4.5	6.5	2.5	14	12.5	12.5	2.5	13.5	1Ω~3KΩ	1Ω~3KΩ
SQS20W	20W	75	10	5	6.5	2.7	14.5	13	14.5	2.7	15	1Ω~3KΩ	1Ω~3KΩ

## ● Ordering Information

Example:

SQS	01	J	R100
(1)	(2)	(3)	(4)
Series Name	Power Rating	Resistance Tolerance	Resistance

(1) Type: SQS SERIES

(2) Power Rating: 5=5W、7=7W、10=10W、15=15W、20=20W

(3) Tolerance: F=±1%、G=±2%、J=±5%

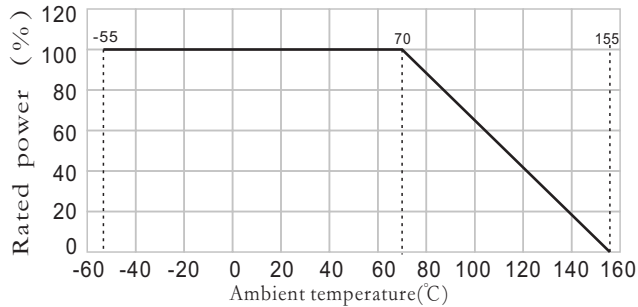
(4) Resistance Value: R100=0.1R、1R00=1Ω、10R0=10Ω、100R0=100Ω

## Reference Standards

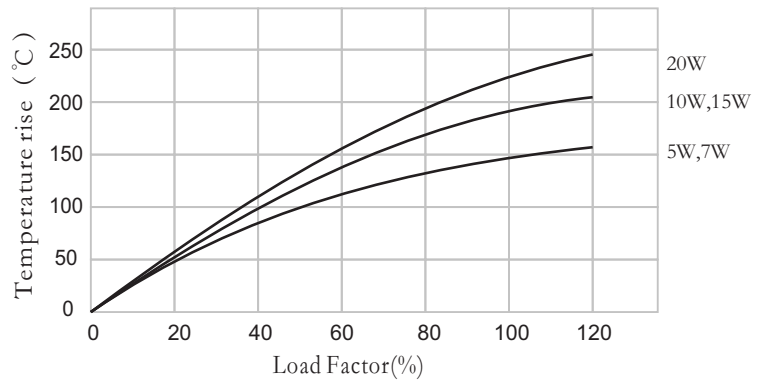
JISC 5201-1

## Derating Curve

Example



## Surface Temperature Rise



## Performance

Test Items	Performance Requirements	Test Methods(JIS C 5201-1)
T.C.R.	Wirewound core: $-300\text{ppm}/^{\circ}\text{C} \leq a \leq +300\text{ppm}/^{\circ}\text{C}$ Oxid core: $-350\text{ppm}/^{\circ}\text{C} \leq a \leq +350\text{ppm}/^{\circ}\text{C}$	JIS5202-5.2 $-55^{\circ}\text{C} \sim +155^{\circ}\text{C}$ $\text{T.C.R.} = (\text{R2}-\text{R1}) \times 10^6 / \text{R1} \times (\text{T2}-\text{T1}) (\text{PPM}/^{\circ}\text{C})$ R1: normal temperature (T1) resistance value; R2: normal temperature+100°C (T2)resistance value
Short time overload	$\Delta R \leq \pm (2\% \text{R0} + 0.01\Omega)$	JIS5202-5.5 2.5 times of rated voltage for 5 seconds
Resistance to soldering heat	$\Delta R \leq \pm (1\% \text{R0} + 0.05\Omega)$	JIS5202-6.4 Soldering temperature: $350^{\circ}\text{C} \pm 10^{\circ}\text{C}$ Solder bath: $3 \pm 0.5 \text{ s}$
Solderability	Soldering cover area beyond 95%	JIS5202-6.5
Temperature cycle	$\Delta R \leq \pm (5\% \text{R0} + 0.1\Omega)$	JIS5202-7.4 $\rightarrow 65^{\circ}\text{C} \rightarrow \text{room temperature} \rightarrow 150^{\circ}\text{C} \rightarrow 5 \text{ cycles}$
Load life in humidity	$\Delta R \leq \pm (5\% \text{R0} + 0.1\Omega)$	JIS5202-7.9 $40 \pm 2^{\circ}\text{C}$ , 90~95% RH Keep in the incubator, with rated DC voltage, testing for 1.5h, OFF for 0.5h then continue the test for 1000h
Insulation resistance	No obvious fire	SJ3272-4.2