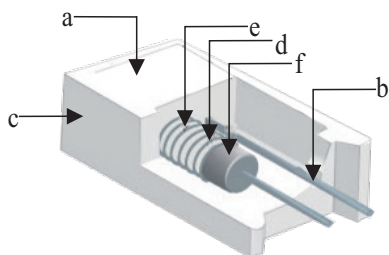




● Features

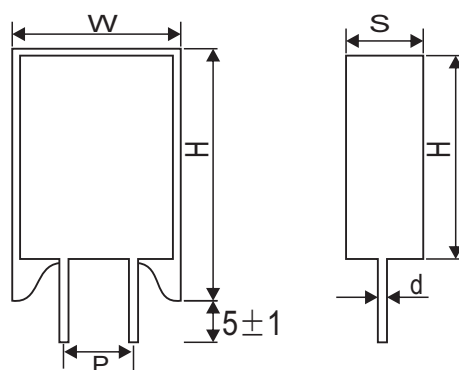
- I Compact type with safety design of non-flammability and insulation
- II Stable long life
- III Products meet Eu-RoHS

● Construction



a	SiO ₂ materials
b	Tinned copper lead wire
c	Ceramic shell
d	Glass core or ceramic core
e	Wire-wound or metal oxide film
f	Tinned iron cap

● Dimensions



Type	Power	Dimensions(mm)				
		H ± 1.5	W ± 1	S ± 1	P ± 1.5	d ± 0.05
SQM	1W	10.0	10.0	5.2	5.0	0.65
	2W	20.5	11.0	7.0	5.0	0.75
	3W	25.0	12.0	8.0	5.0	0.75
	4W	25.0	13.0	10.0	5.0	0.75
	5W	25.0	13.0	10.0	5.0	0.75
	6W	39.0	13.0	10.0	5.0	0.75
	7W	39.0	13.0	10.0	5.0	0.75
	8W	39.0	13.0	10.0	5.0	0.75
	9W	51.0	13.0	10.0	5.0	0.75
	10W	51.0	13.0	10.0	5.0	0.75
	11W	51.0	13.0	10.0	5.0	0.75
	10WS	35.0	16.0	12.0	7.5	0.75
	10WB	25.0	20.0	8.50	10.0	0.75
	15WS	25.0	20.0	8.50	10.0	0.75
	15W	40.0	20.0	10.0	10.0	0.80
	20W	50.0	20.0	10.0	12.0	0.80

● Reference Standards

JISC 5201-1

Ordering Information

Example:

SQM (1)	01 (2)	J (3)	R10 (4)	B (5)	A (6)
Series Name	Power Rating	Resistance Tolerance	Resistance	Packing	Special code

(1)Type: SQM SERIES

(2)Power Rating: 1=1W、2=2W、3=3W、5=5W、7=7W、10=10W、15=15W、20=20W

(3)Tolerance: F=±1%、G=±2%、H=±3%、J=±5%

(4)Resistance Value:10R0=10R、R10=0.1Ω、47R0=47Ω

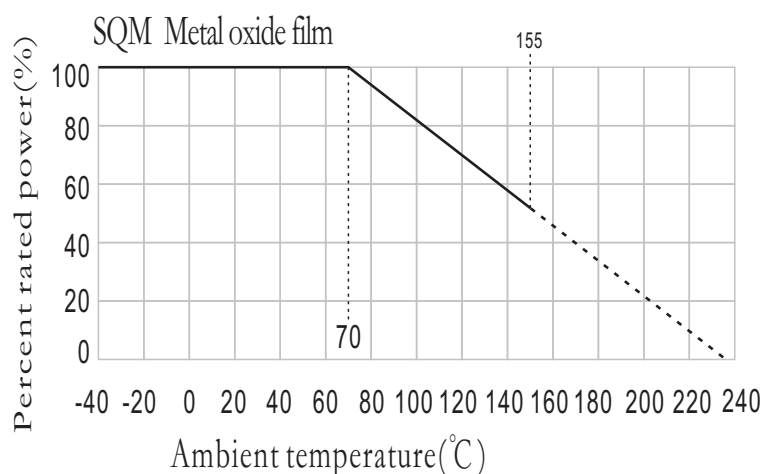
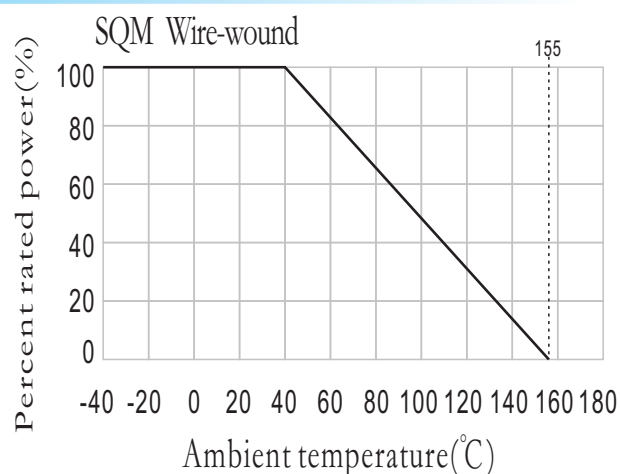
(5)Packing:B=bulk standard

(6)Special code: A:wirewound type ceramic core; B:Metal oxide film type; C:wirewound type glass core;
D:non-inductive type

Applications And Ratings

Power	Resistance Range(Ω)		MaxWorking Voltage	Max Overload Voltage	Dielectric Withstanding Voltage	T.C.R
	Metal oxide film type	Wire wound type				
1W	100~39K	0.01~1K	150V	500V	1000V	Metal oxide film ± 350PPM/°C Wirewound ± 100PPM/°C
2W	100~39K	0.01~2K	150V	750V		
3W	100~39K	0.01~3K	350V	1000V		
4W	100~39K	0.01~3K	350V	1000V		
5W	100~50K	0.01~10K	350V	1000V		
6W	100~50K	0.01~10K	350V	1000V		
7W	100~100K	0.05~20K	500V	1500V		
8W	100~100K	0.05~20K	500V	1500V		
9W	100~100K	0.05~20K	500V	1500V		
10W	100~100K	0.1~20K	750V	1500V		
11W	100~100K	0.1~20K	750V	1500V		
10WS	100~100K	0.1~20K	800V	1500V		
10WB	100~100K	0.1~20K	800V	1500V		
15WS	100~100K	0.1~20K	750V	1500V		
15W	100~100K	0.1~20K	1000V	1500V		
20W	100~100K	0.1~20K	1000V	1500V		

Derating Curve



Performance

Test Items	Test Methods(JIS C 5201-1)	Performance Requirements
Short Time Overload	2.5times RCWV for 5 seconds	$\pm (2\%R+0.05\Omega)$
Dielectric Withstanding Voltage	in V-Block for 60 seconds	by type
Temperature Coefficient Of Resistance	-55°C to +155°C	$\pm 300\text{ppm}/^\circ\text{C}$
Insulation Resistance	in V-Block	$>100\text{M}\Omega$
Solderbility	235°C for 5 ± 0.5 seconds	95% min.coverage
Resistance to Solvent	Trichroethane for 1min with ultrasonic	coatings and marking
Terminal Strength	Direct load for 10 sec in the direction of the terminal leads	$\geq 2.5\text{kg}(54.5\text{N})$
Pulse Overload	4 times RCWV 10000 cycles(1 sec, on,25sec. off)	$\pm (2\%R+0.05\Omega)$
Load life in Humidity	$40\pm 2^\circ\text{C}$, 90~95% RH at RCWV for 1000hrs,(1.5hrs, or 0.5 hrs.off)	$\pm (5\%R+0.05\Omega)$
Load life	70°C at RCWV for 1000hrs(1.5hrs, or 0.5hrs.off)	$\pm (5\%R+0.05\Omega)$
Temperature Cycling	60°C , room temp, 150°C , room temp. for 5 cycles	$\pm (2\%R+0.05\Omega)$
Resistance to Soldering Heat	$350^\circ\text{C} \pm 10^\circ\text{C}$ for 3 ± 0.5 seconds	$\pm (1\%R+0.05\Omega)$

*Rated continuous working voltage(RCWV) $=\sqrt{\text{power rating} \times \text{resistance value}}$