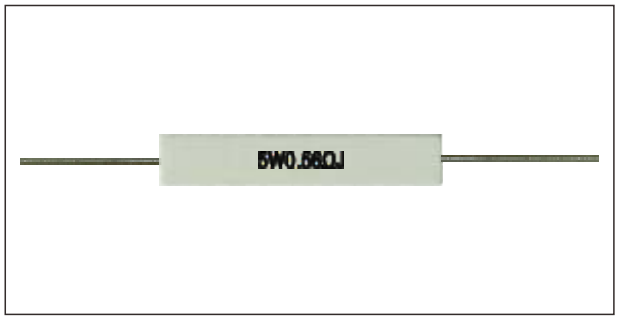
SQO Ceramic Resistor



Features

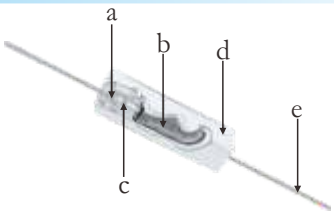
Ⅰ Low TC, high pulse capability

Ⅱ Non-inductive metal element

Ⅲ High stability

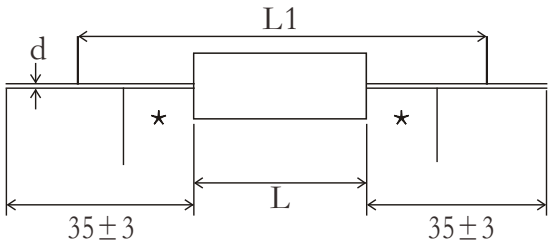
Ⅳ Excellent overload capablity

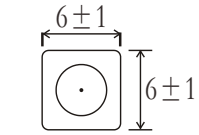
Construction



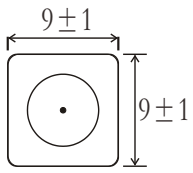
a	Alloy Welded Construction
b	Quartz Silica Powder
c	Alloy Electrical Resistance Ribbon
d	Fire Proof Ceramic Housing
e	Tinned Copper Terminals

Dimensions,Applications And Ratings





SQO2,SQO4,SQO7
SQO7A



SQO7,SQO9
SQO10,SQO12

*6mm,reduced solderability in this area

Type	Rated Power (W) at70℃	Dimensions(mm)			Resistance Range		Typical Weight PER PC(gms)
		L±1.5	▲L1±1.5	d±0.05	Min	Max	
SQO2	2.5W	15	35	0.8	R0025	R047	1.6
SQO4	4W	18	40	0.8	R003	R082	2.0
SQO5	5W	25	45	0.8/1.0	R003	R10	2.3
SQO7	7.5W	25	45	0.8/1.0	R003	R10	4.8
SQO7A	7W	38	60	0.8/1.0	R004	R15	4.9
SQO9	9W	38	60	0.8/1.0	R004	R15	7.3
SQO10	10W	38	60	1.0	R004	R15	7.5
SQO12	12W	50	70	1.0	R008	R20	10.0
SQO15	15W	75	95	1.0	R008	R20	15.0

Ordering Information

Example:

SQO	4	F	100R0
(1)	(2)	(3)	(4)
Series Name	Power Rating	Resistance Tolerance	Resistance Value

(1)Type: SQO SERIES

(2)Power Rating: 2=2.5W,4=4W,5=5W,7=7.5W,7A=7W,9=9W,10=10W,12=12W15=15W

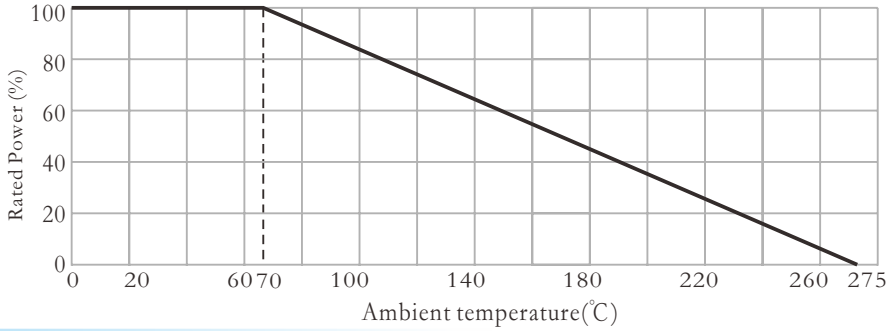
(3)Tolerance: F=±1%, G=±2%, H=±3%, J=±5%, K=±10%

(4)Resistance Value:100R0=100Ω

Reference Standards

JISC 5201-1

Derating Curve



Performance

Test Items	Specifications
Power Rating (Rated Ambient Temperature)	Full Power dissipation at 70℃ and linearly derated to zero at +275℃ - [Refer Derating curve above]
Resistance Tolerances Available	±10% (K); ±5% (J); ±3% (H); ±2%(G); ±1% (F)
Temperature Range	-55℃ to +275℃ with suitable derating as per derating curve
Voltage Rating / Limiting Voltage / Max Working Voltage	$V=\sqrt{PxR}$
Voltage Proof / Dielectric Withstanding Voltage	ΔR ± (1%R+0.05Ω). No flashover, mechanical damage.
Short Time Overload (5 x Rated power for 5 secs)	ΔR ± (0.75%R+0.05Ω) - Average. ΔR ± (1.25%R+0.05Ω) - For resistance values near maximum range.
Temperature Co-efficient of Resistance (Measured from -55℃ to +125℃ referenced to +25℃)	±60 ppm/℃ to900 ppm/℃ (Depending on resistance value and can be lowered by using 1mmØ terminations)
Insulation Resistance	> 1000MΩ(min)
Temperature Cycling (Room temperature→-55℃ → Room temperature →200℃ →Room temperature for 5 cycles)	ΔR ±(0.5%R+0.05Ω)
Damp Heat (Steady State) (40℃ at 93% R.H for 1000 hours - no load applied)	ΔR ±(0.5%R+0.05Ω)- Average
Endurance - Load Life (70℃ with limiting voltage - 1.5 hours on / 0.5 hours off for 1000 hours)	ΔR±(≤ 2.75%R+0.05Ω) - Average