



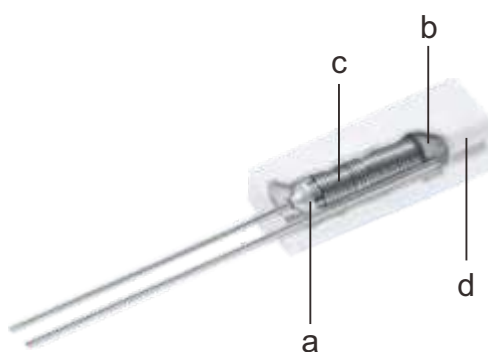
● Features

Choice of fibre glass or ceramic core.
Choice of mounting pillars for additional stability.
Non inductive type available

● Applications

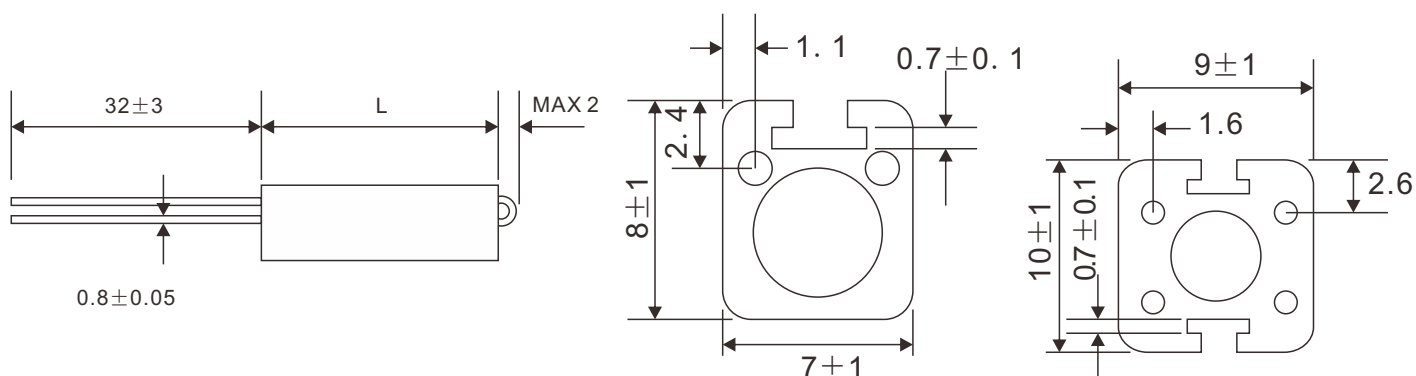
Space saving, vertical mounting resistors.
Consumer and industrial applications

● Construction



a	Mechanically Crimped Termination Assembly
b	Quartz Silica Powder
c	Alloy Wire Wound Element on Fibre Glass Substrate / Heat Conducting Ceramic Substrate
d	Fire Proof Ceramic Housing

● Power 、 Dimensions And Resistance



SQV4, SQV5, SQV7

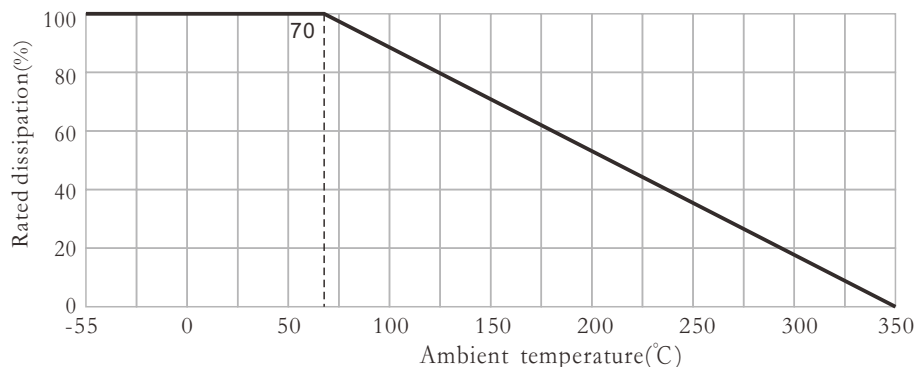
SQV7, SQV9, SQV11, SQV17

Type	Power rating at 70°C	Dimensions (mm) L±1.5	Resistance rating		Typical weight PER PC (g)
			min	max	
SQV4	4W	20.0	R04	11K	2.94
SQV5	5W	25.0	R05	16K	3.30
SQV7B	7W	38.0	R10	22K	4.90
SQV7	7W	25.0	R05	16K	5.00
SQV9	9W	38.0	R10	33K	7.90
SQV11	11W	50.0	R10	47K	10.35
SQV17	17W	75.0	R10	82K	14.00

Reference Standards

JISC 5201-1

Derating curve



Performance

Parameter/performance test & test method	Performance requirements (JISC 5201-1)
Power rating (rated ambient temperature)	Full power dissipation at 70°C and linearly derated to zero at 350°C (refer derating curve above)
Resistance tolerances available	±10% (K); ±5% (J); ±3% (H); ±2% (G); ±1% (F)
Temperature range	-55°C to +350°C with suitable derating as per derating curve.
Voltage rating / max working voltage	$V = \sqrt{P \times R}$
Maximum overload voltage	Varies depending on resistance value, duration of overload And type of pulse waveform (contact factory for details)
Dielectric withstanding voltage / voltage proof (based on limiting voltage x 2 for 60secs)	$\Delta R \pm (1\%R + 0.05 \Omega)$ - no flashover, mechanical damage, arcing or insulation breakdown.
Short time overload (5 × rated power for 5 secs)	$\Delta R \pm (2\%R + 0.05 \Omega)$
Temperature co-efficient of resistance	±120 ppm / °C for <R10, ±80 ppm / °C for <1R0 ±60 ppm / °C for <100R ±90 ppm / °C or ±30 ppm / °C for >100R
Insulation resistance	>1000 MΩ (min)
Temperature cycling (room temperature -55°C room temperature 200°C room temperature for 5 cycles)	$\Delta R \pm (2\%R + 0.05 \Omega)$
Damp heat (steady state) (40°C at 93%R.H for 1000 hours - no load applied)	$\Delta R \pm (2\%R + 0.05 \Omega)$ average
Endurance - load life (70°C with limiting voltage - 1.5 hours on / 0.5 hours off for 1000 hours)	$\Delta R \pm (\leq 3\%R + 0.05 \Omega)$ average
Terminal tensile strength	50 Newtons.
Resistance to soldering heat (260°C - 270°C for 10 secs)	$\Delta R \pm (2\%R + 0.05 \Omega)$ - Typical

● Ordering Information

Example

SQV	5W	J	100R0
(1)	(2)	(3)	(4)
Type	Rated power	Tolerance	Resistance

(1) Type: SQV Resistor

(2) Rated power: 4W, 5W, 7W, 9W, 11W, 17W

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

(4) Resistance: R100 = 0.1 Ω , 1R00 = 1 Ω , 10R0 = 10 Ω , 10K00 = 1K Ω , 1M00 = 1M Ω