HITANO
ENTERPRISE CORP.®

CEMENT RESISTORS SQP SERIES

Feature

- Small size and low cost.
- Super heat dissipation, instant overload capability.
- Instant overload capability
- Standard tolerance: ±1%, ±5%
- Standard Value: E24 series as range below
- For high resistance values, metal oxide film rods, will be utilized to replace the wire winding core.
- .Operating temperature : -55ºC ~+275ºC

Material

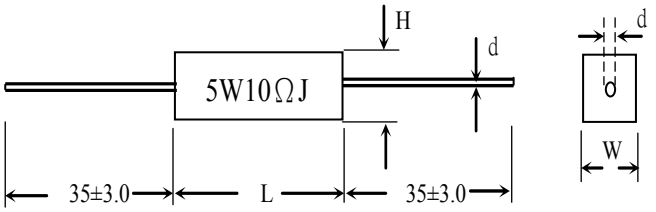
Element: Alloy Resistance Wire

Core: High purity ceramic Al2O3

Termination: Standard solder-plated copper lead

Case: Ceramic bathtub

Dimension



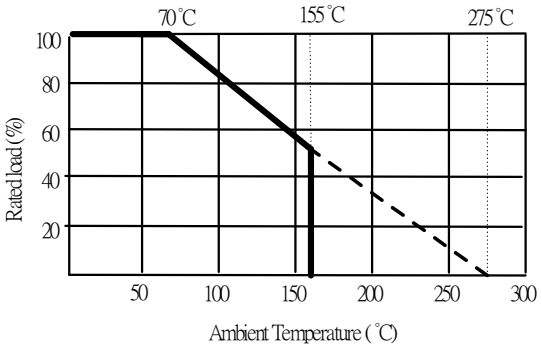
General Specification

TYPE	DIMENSION(mm)				POWER RATING	MAXIMUM WORKING VOLTAGE	MAXIMUM OVERLOD VOLTAGE	RESISTANCE RANGE	
	L	D	H	d±0.05				WIREWOUND	MOR RODS
SQP20	18.0	6.5	6.5	0.80	2W	350V	700V	0.1Ω-100Ω	101Ω-1MΩ
SQP30	22.0	8.0	8.0	0.80	3W	500V	1000V	0.1Ω-100Ω	101Ω-1MΩ
SQP50	22.0	10.0	9.5	0.80	5W	750V	1500V	0.1Ω-100Ω	101Ω-1MΩ
SQP70	35.0	10.0	9.5	0.80	7W	1000V	1500V	0.5Ω-500Ω	501Ω-47KΩ
SQP100	48.0	10.0	9.5	0.80	10W	1000V	1500V	0.5Ω-1KΩ	501Ω-47KΩ
SQP150	48.5	12.5	11.5	0.80	15W	1000V	1500V	0.5Ω-1KΩ	501Ω-47KΩ
SQP200	60.0	15.0	13.5	0.80	20W	1000V	1500V	0.5Ω-1KΩ	501Ω-47KΩ
SQP250	60.0	15.0	13.5	0.80	25W	1000V	1500V	0.1Ω-150Ω	501Ω-47KΩ

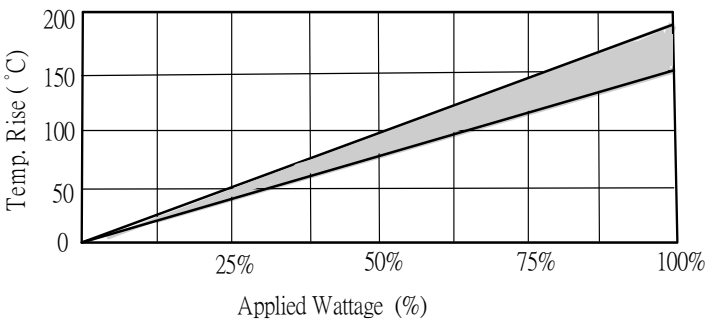
* Maximum Working Voltage determined by E=√P*R, where E should not exceed value listed in column above.

**Maximum Overload Voltage equals to 2.5XE, but should not exceed value listed in column above.

Derating Curve



Temperature Rise



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Characteristics

Item	Requirement	Test Method
Short Time Overload	±2%+0.05Ω	JIS-C-5201-1 5.5 RCWV*2.5 or Max. overload voltage for 5 seconds
Insulation Resistance	＞1000MΩ	JIS-C-5201-1 5.6 Apply 100VDC for 1 minute
Endurance	±5%+0.05Ω	JIS-C-5201-1 7.10 70±2℃, Max. RCWV for 1000 hrs with 1.5 hrs “ON” and 0.5hrs “OFF”
Damp Heat with Load	±5%+0.05Ω	JIS-C-5201-1 7.9 40±2℃, 90~95% R.H. RCWV for 1000 hrs with 1.5 hrs “ON” and 0.5hrs “OFF”
Solderability	90% min. Coverage	JIS-C-5201-1 6.5 245±5°C for 3 seconds
Dielectric Withstanding Voltage	1000V	JIS-C-5201-1 5.7 Apply Max. Overload Voltage for 1 minute
Temperature Coefficient	±300PPM/℃	Resistance value at room temperature and room Temperature+100°C
Pulse Overload	±1%+0.05Ω	JIS-C-5201-1 5.8 4 times RCWV for 10000 cycles with 1 second “ON” and 25 seconds “OFF”
Resistance To Solvent	No deterioration of coatings and markings	JIS-C-5201-1 6.9 Trichroethane for 1 min. with ultrasonic
Terminal Strength	Tensile: ≧2.5 kg	Direct Load for 10 seconds In the direction off the terminal leads
Shelf Life	ΔR=±0.1%	12 months at room temperature 25±3°C, 80%RH Max.

***Storage Temperature : 25±3℃; Humidity＜80%RH**

Part Numbering

SQP50	**J**	**B**	-	**100R**
↓	↓	↓		↓
Type/Power	Tol.	Package		Resistance
SQP50	F=±1%	B=Bulk		0R1 = 0.1Ω
SQP70	J=±5%			10R = 10Ω
SQP100				1K2R = 1.2KΩ
SQP150				
SQP200				
SQP250				