MAX-QUALITY ELECTRIC CO., LTD.

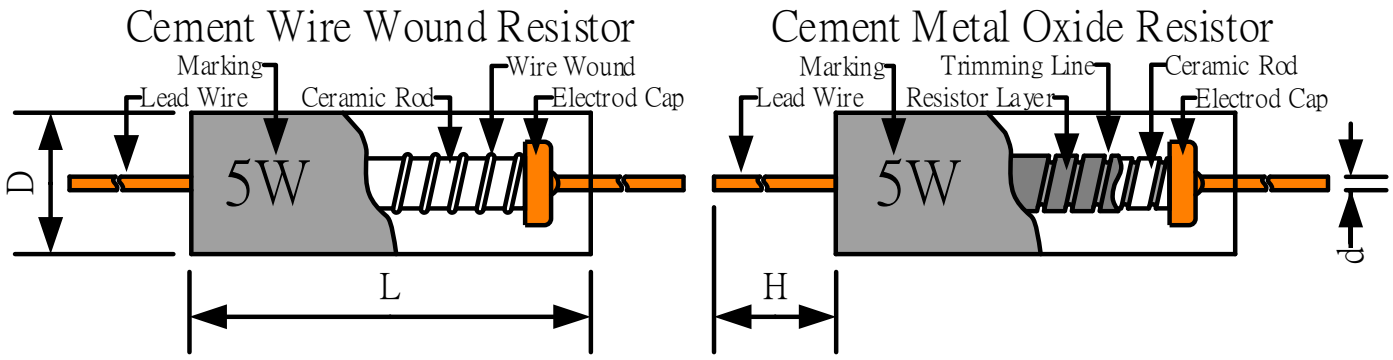
SQP

Cement Fixed Resistors

FEATURE

1. Low noise .
2. Instance overload capability; long term stability .
3. Excellent insulation being used in P.C.B.
4. Excellent heat dissipation; small linear .
5. Metal oxide film cutting core can offer high range resistance (1Ω~100K)
6. Operating temperature range
   - Wire Wound：-50℃~+155℃
   - Metal oxide：-50℃~+155℃
7. The special products can be used metal glazed (hi voltage； hi value)

★DIMENSIONS

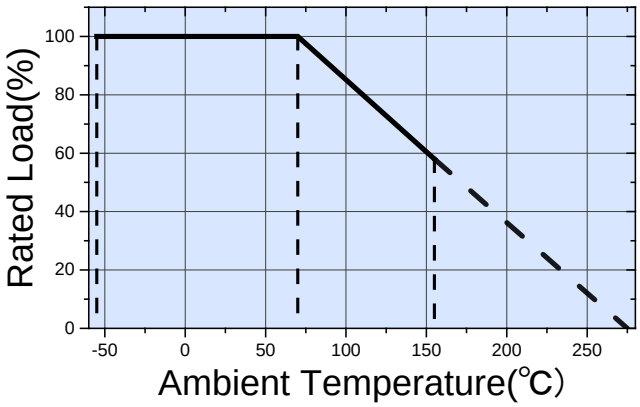


SQP	DIMENSION(mm)					Value Range		Max working voltage
	L±0.5	H ±3	D±1	D1±1	d	Wire Wound	Metal oxide	
2W	18	32.0 ±3	7	7	0.65±0.03	0.1Ω~50Ω	50Ω~20K	150V
3W	22	32.0 ±3	8	8	0.8±0.03	0.1Ω~50Ω	50Ω~33K	300V
4W	22	32.0 ±3	8	8	0.8±0.03	0.1Ω~50Ω	50Ω~33K	300V
5W	22	32.0 ±3	9.5	9	0.8±0.03	0.1Ω~50Ω	50Ω~50K	350V
7W	35	32.0 ±3	9.5	9	0.8±0.03	0.1Ω~100Ω	100Ω~50K	500V
10W	48	32.0 ±3	9.5	9	0.8±0.03	0.1Ω~100Ω	100Ω~50K	500V
15W	48	32.0 ±3	12.5	12	0.8±0.03	0.1Ω~100Ω	100Ω~50K	500V
20W	60	32.0 ±3	14	13	0.8±0.03	0.1Ω~100Ω	100Ω~50K	500V
25W	60	32.0 ±3	14	13	0.8±0.03	0.1Ω~100Ω	100Ω~50K	1000V
30W	77	32.0 ±3	18	17	0.8±0.03	0.1Ω~1K		1000V
40W	90	32.0 ±3	19	18	0.8±0.03	0.1Ω~1K		1000V
50W	90	32.0 ±3	19	18	0.8±0.03	0.1Ω~1K		1000V

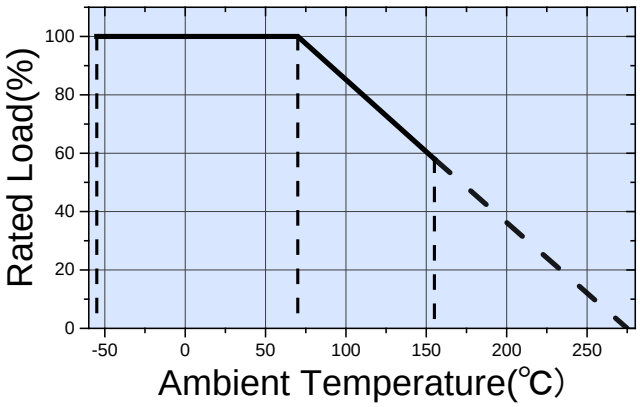
Resistance Range for standard resistance，below or over this resistance on request.

★Power Derating Curve

●Cement Wire Wound Resistor



●Cement Metal Oxide Resistor



★ENVIRONMENTAL CHARACTERISTICS

PERFORMANCE TEST	TEST METHOD	Wire Wound	Metal Oxide
Short Time Overload	**2.5 times RCWV for 5 seconds**	**±(2%+0.05Ω)**	**±(0.25%+0.05Ω)**
Temperature Coefficient	**Resistance value at room (+25℃) Temperature and room Temperature(+125℃)**	**±300ppm**	**±200ppm**
Load Life	**70℃ at RCWV for1000hrs.(1.5hrs. on，0.5hrs.off)**	**±(5%+0.05Ω)**	**±(1.5%+0.05Ω)**
Load Life In Humidity	**40±2℃ 90~95%RH at RCWV for1000hrs. (1.5hrs. on，0.5hrs.off)**	**±(5%+0.05Ω)**	**±(1.5%+0.05Ω)**
Solder Ability	**235±5℃ for 2±0.5 seconds**	**95% min. coverage**	**95% min. coverage**
Pulse Overload	**4 times RCWV for10000cycles(1sec.on，25secs.off)**	**MAX.1500V ±(1%+0.05Ω)**	**MAX.1500V ±(1%+0.05Ω)**
Dielectric Withstanding volt		**MAX.1000V**	**MAX.1000V**

Rated continuous Working Voltage (RCWV) $= \sqrt{\text{Power. Rating} \times \text{Resistance. Value}}$

★PART NUMBER:

SQP
↓
Type
Cement SQP Type

5W
↓
Power rating
2W
3W
……
40W
50W

3K	
↓	
Resistance	
1R	1Ω
10R	10Ω
……	
1K2	1K2Ω
10K	10KΩ

J	
↓	
Tolerance	
F	± 1%
G	± 2%
J	± 5%
K	± 10%