CEMENT WIREWOUND RESISTORS (MIL TYPE LRW)
水泥電阻

MIL TYPE LRW

Mil type lrw are made by winding the resistance wires on the alkaliless ceramic cores, then coated with noncorrosive, heat-proof and humidity-proof material. Cement type is the one with special flameproof cement stuffed in the ceramic case.

FEATURES

- Small dimension,excellent stability in high temperature,resistant to humidity and shock.
- Completely insulated character suitable for printed circuit board.
- Precision resistance values with longer life.
- In high resistance values,the winding cores will be replaced by power film cores.
- Super heat dissipation;small linear temperature coefficient.
- Instant overload capability; low noise figures and low annual shift on resistance values.

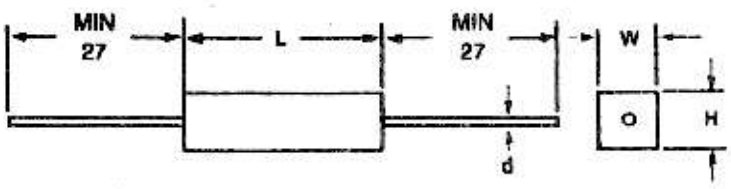
水泥電阻

把電阻線繞在無鹼性耐熱瓷件上，外面加上耐熱、耐濕、及耐腐蝕之材料保護固定而成。水泥型電阻是把繞線電阻體放入方形瓷器框內，用特殊不燃性耐熱水泥充填密封而成。

特性

- 體積小、耐震、耐濕及良好散熱，低價格
- 全絕緣，適用於印刷電路板
- 瓷棒上繞線然後點焊，製出精確電阻值
- 高電阻值採用金屬氧化膜體代替繞線方式
- 耐熱性優，電阻溫度係數小，呈直線變化
- 耐短時間超負載；低雜音，阻值經年無變化

SQP

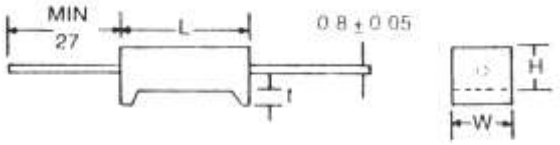


TYPE	DIMENSIONS(mm)				RESISTANCE RANGE (Ω)		MAX WORKING VOLTAGE
SQP	L±1	W±1	H±1	d±1	WIRE WOUND	MO	
2W	18.0	7.0	7.0	0.65	0.01Ω~ 50Ω	50~20KΩ	150V
3W	22.0	8.0	8.0	0.8	0.01Ω~ 50Ω	50~33KΩ	350V
5W	22.0	9.5	9.0	0.8	0.01Ω~ 50Ω	50~50KΩ	350V
7W	35.0	9.5	9.0	0.8	0.01Ω~ 500Ω	500~50KΩ	500V
10W	48.0	9.5	9.0	0.8	0.01Ω~ 500Ω	500~50KΩ	750V
15W	48.0	12.5	12.0	0.8	0.01Ω~ 500Ω	500~150KΩ	1000V
20W	60.0	14.0	13.0	0.8	0.01Ω~ 500Ω	500~150KΩ	1000V
25W	60.0	14.0	13.0	0.8	0.01Ω~ 500Ω	500~150KΩ	1000V

※ **NOTE:Non-inductive type up to 27Ω**

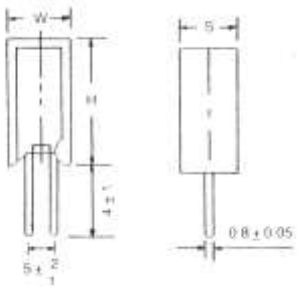
※ **30W,40W on request**

SQT



TYPE	DIMENSION(mm)				RESISTANCE RANGE (Ω)	
SQT	W±1	H ± 1	L ±1.5	t ± 0.5	WIRE WOUND	MO
5W	10	9	22	1.5	0.1~50Ω	50Ω~50KΩ
7W	10	9	35	3.0	0.1~500Ω	500Ω~47KΩ
10W	10	9	48	3.0	0.1~500Ω	500Ω~47KΩ

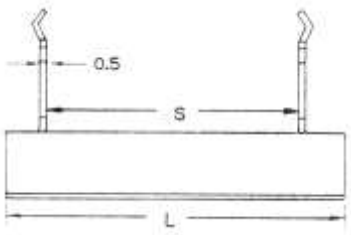
SQM

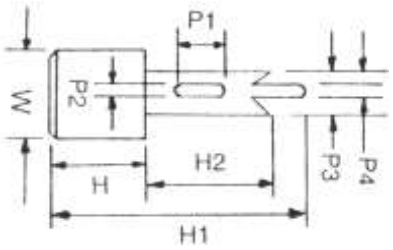


TYPE	DIMENSION(mm)			RESISTANCE	RANGE (Ω)
SQM	H ± 1.5	W ± 1	S ± 1	WIRE WOUND	MO
3W	25	12	9	0.1~50Ω	50~50KΩ
5W	25	13	9	0.1~50Ω	50~50KΩ
7W	39	13	9	0.1~500Ω	500~47KΩ
10W	51	13	9	0.1~500Ω	500~47KΩ

※NOTE: values lower than 0.1 OHM and higher than 47K OHM are available upon request

SQZ

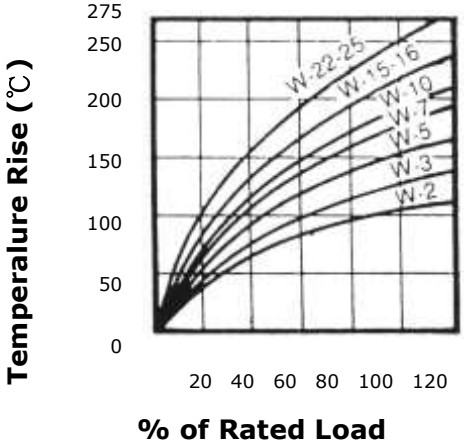




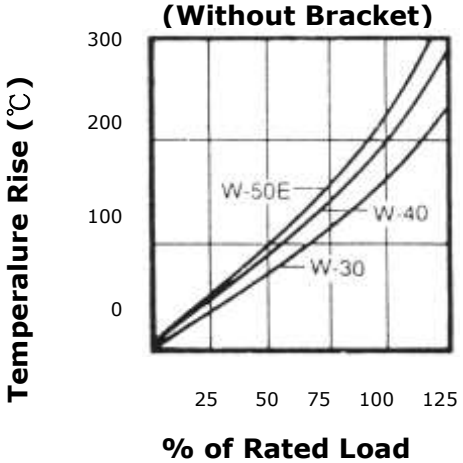
TYPE	RESISTANCE RANGE(Ω)		DIMENSIONS (mm)									
SQZ	WIRE WOUND	MO	L± 1.5	H± 1	W± 1	S± 1.5	H1± 1	H2± 1	P1± 0.2	P2± 0.2	P3± 0.2	P4± 0.2
5W	0.1Ω-100Ω	100Ω-50KΩ	27.0	9.5	9.5	15.0	24.0	9.5	4.0	2.0	5.0	1.4
7W	0.1Ω-500Ω	500Ω-50KΩ	35.0	9.5	9.5	22.5	24.0	9.5	4.0	2.0	5.0	1.4
10W	0.2Ω-500Ω	500Ω-50KΩ	48.0	9.5	9.5	35.0	24.0	9.5	4.0	2.0	5.0	1.4
15W	0.5Ω-500Ω	500Ω-150KΩ	48.0	12.5	12.5	32.5	34.5	15.0	7.0	6.0	10.0	2.7
20W	1Ω-50Ω	500Ω-150KΩ	63.5	12.5	12.5	45.0	34.5	15.0	7.0	6.0	10.0	2.7
25W	1Ω-50Ω	500Ω-150KΩ	63.5	12.5	12.5	45.0	34.5	15.0	7.0	6.0	10.0	2.7

※NOTE: Resistance up to 50 Ω maximum for Non-Inductive type

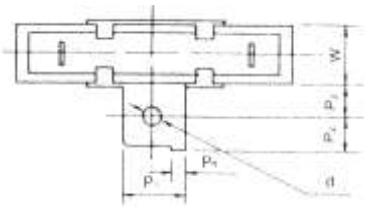
TEMPERATURE RISE AT 25 ℃



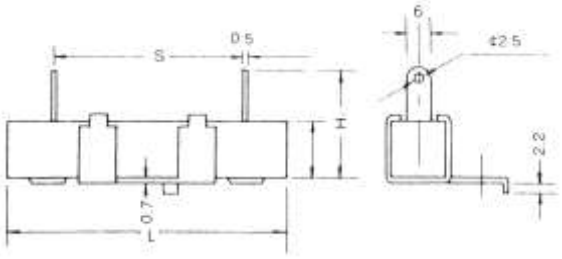
TEMPERATURE RISE AT 25℃
(Without Bracket)

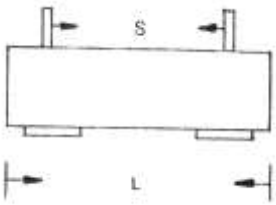


SQHG



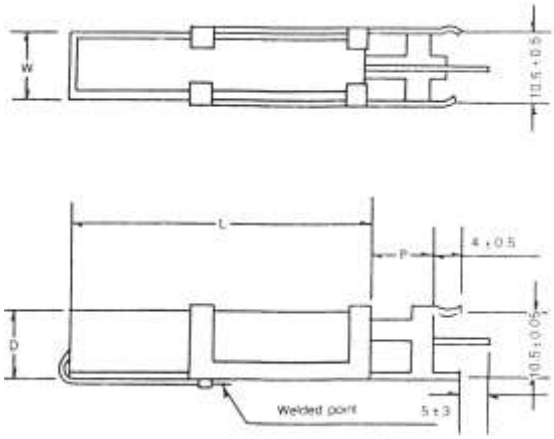
SQH





TYPE	RESISTANCE RANGE(Ω)		DIMENSIONS(mm)									
SQH	WIRE WOUND	MO	L±2	H±1	W±1	S±1	H1±1	P1±1	P2±1	P3±1	P4±1	d± 0.05
10W	0.5Ω-500Ω	500Ω-50KΩ	48.0	10.0	10.0	33.0	21.0	12.0	6.0	8.0	3.0	4.0
15W	1Ω-500Ω	500Ω-150KΩ	48.0	12.0	12.0	33.0	21.0	12.0	6.0	8.0	3.0	4.0
20W	1Ω-500Ω	500Ω-150KΩ	63.7	12.0	12.0	42.0	24.0	12.0	6.0	8.0	3.0	4.0
30W	1Ω-500Ω		75.0	19.0	18.0	56.0	30.0	17.0	8.0	10.0	3.0	4.0
40W	1Ω-500Ω		90.0	19.0	18.0	68.0	30.0	17.0	8.0	10.0	3.0	4.0
50W	1Ω-500Ω		90.0	19.0	18.0	68.0	30.0	17.0	8.0	10.0	3.0	4.0

※**NOTE: Resistance up to 15Ω maximum for Non-Inductive type**



TYPE	DIMENSION(mm)				RESISTANCE RANGE (Ω)	
SPS	W±1	D±1	L±1	P±1	Wirewound	MO
5W	10	9	22	5	0.1Ω~50Ω	56Ω~50KΩ
7W	10	9	35	10	0.1Ω~300Ω	300Ω~50KΩ
10W	10	9	48	10	0.1Ω~500Ω	500Ω~50KΩ
15W	12	13	48	10	0.1Ω~1KΩ	1KΩ~50KΩ
20W	12	13	60	10	0.1Ω~1KΩ	1KΩ~50KΩ

ELECTRICAL PERFORMANCE

TEST ITEMS	CONDITION	SPEC.
Resistance Temp. Coeff.	-55℃~155℃	±300ppm/℃
Short Time Overload	10 times of rated wattage for 5 sec	±2%
Rated Load	Rated wattage for 30 min	±1%
Voltage Withstanding	1,000V AC 1min	no change
Insulation Resistance	500V megger	1,000MΩ
Load Life	70℃ on-off cycle 1000hrs	±5%
Moisture-proof Load Life	40℃ 95%RH on-off cycle 1000hrs	±5%
Incombustibility	16 times of rated wattage for 5 min	not flamed