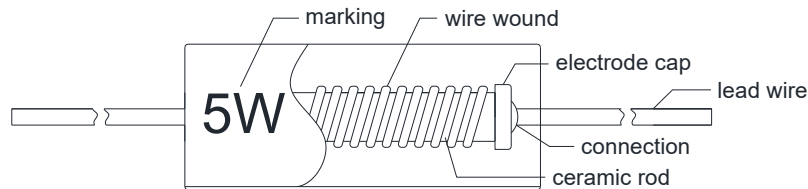


Features

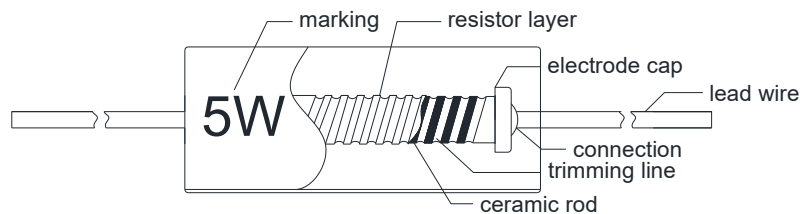
- Low noise .
- Instance overload capability; long term stability .
- Excellent insulation being used in P.C.B.
- Excellent heat dissipation; small linear .
- Metal oxide film cutting core can offer high range resistance ($1\Omega\sim 100K$)
- Operating temperature range
- Wire Wound : $-55^{\circ}\text{C}\sim +155^{\circ}\text{C}$ Metal oxide : $-30^{\circ}\text{C}\sim +155^{\circ}\text{C}$

Construction

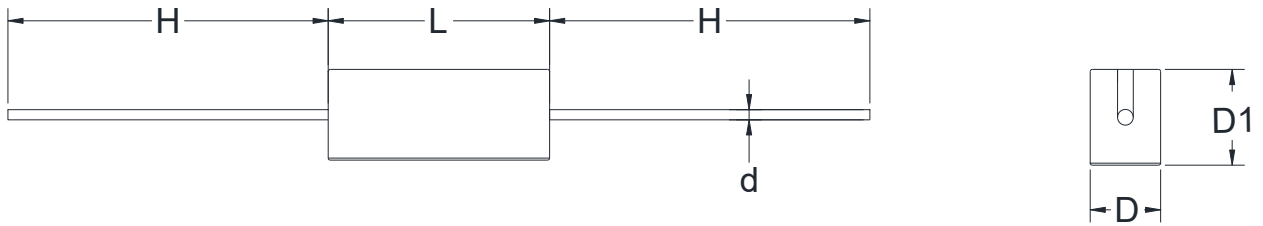
cement wire wound resistor



cement metal oxide resistor

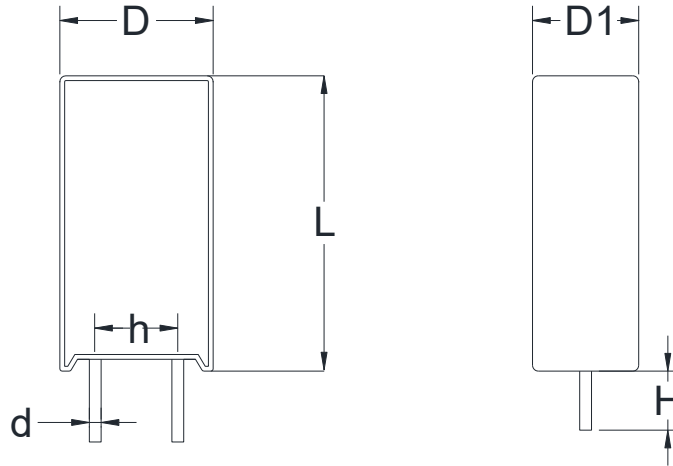


■ Dimensions



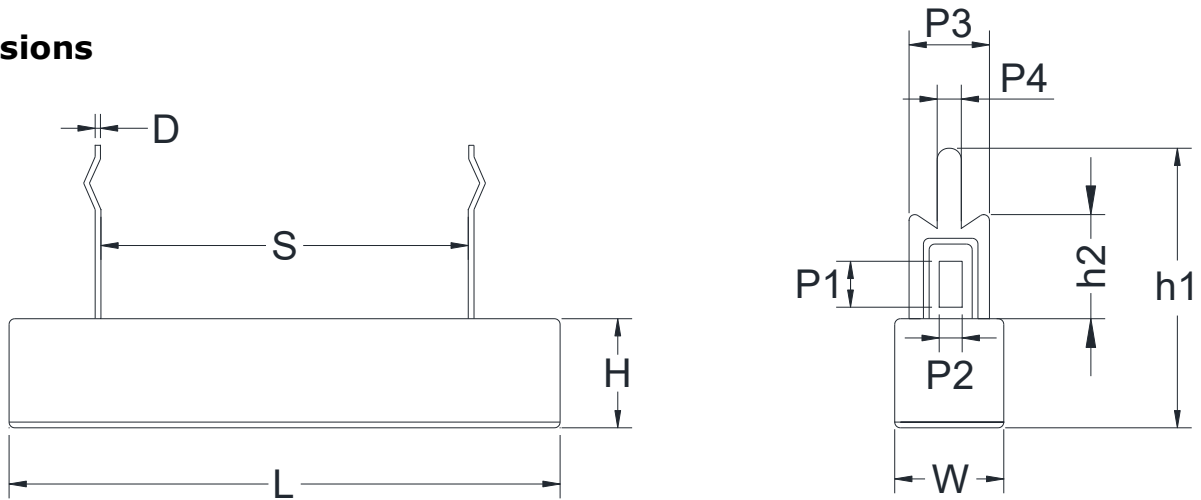
POWER RATING	Dimensions 寸法(mm)					Value Range		MAX WORKING VOLTAGE
	L±1.5	H±3	D±1.5	D1±1.5	d±0.03	Wire Wound	Metal oxide	
2W	18	32	7	7	0.65	0.1Ω~50Ω	50Ω~50K	150V
3W	22	32	8	8	0.8	0.1Ω~50Ω	50Ω~50K	300V
5W	22	32	9.5	9	0.8	0.02Ω~50Ω	50Ω~50K	350V
7W	35	32	9.5	9	0.8	0.1Ω~50Ω	50Ω~50K	500V
10W	48	32	9.5	9.5	0.8	0.1Ω~100Ω	100Ω~50K	500V
15W	48	32	12.5	12.5	0.8	0.1Ω~100Ω	100Ω~50K	500V
20W	60	32	14	13	0.8	0.1Ω~100Ω	100Ω~50K	500V
25W	60	32	14	13	0.8	0.1Ω~100Ω	100Ω~50K	1000V
30W	75±2	32	19	19	0.8	0.1Ω~1K		1000V
40W	90±2	32	19	19	0.8	0.1Ω~1K		1000V
50W	90±2	32	19	19	0.8	0.1Ω~1K		1000V

■ Dimensions



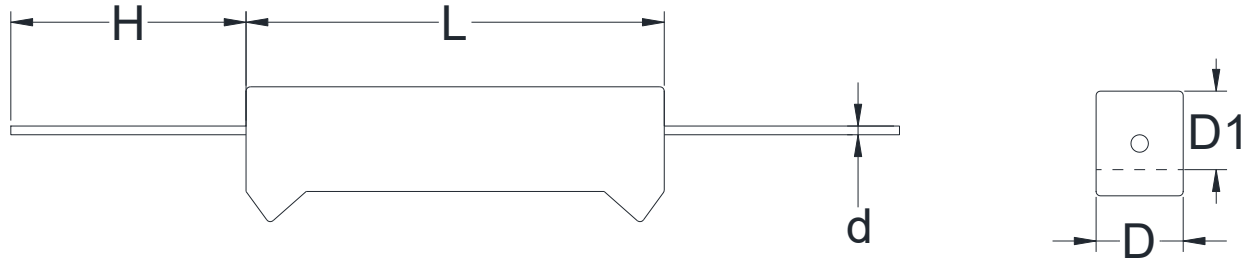
POWER RATING	Dimensions 寸法(mm)						Value Range		MAX WORKING VOLTAGE
	$L \pm 1.5$	$H \pm 3$	$D \pm 1.5$	$D1 \pm 1.5$	$h \pm 1$	$d \pm 0.03$	Wire Wound	Metal oxide	
2W	20	4~15	11.5	7.5	5	0.65	0.01 Ω ~50 Ω	50 Ω ~50K	150V
3W	25	4~15	12	8.5	5	0.8	0.01 Ω ~50 Ω	50 Ω ~50K	300V
5W	25	4~15	13	9	5	0.8	0.01 Ω ~50 Ω	50 Ω ~50K	350V
7W	39	4~15	13	9	5	0.8	0.01 Ω ~100 Ω	100 Ω ~50K	500V
10W	51	4~15	13	9	5	0.8	0.01 Ω ~100 Ω	100 Ω ~50K	750V
10WS	35	4~15	16	12	7.5	0.8	0.01 Ω ~100 Ω	100 Ω ~50K	750V

Dimensions



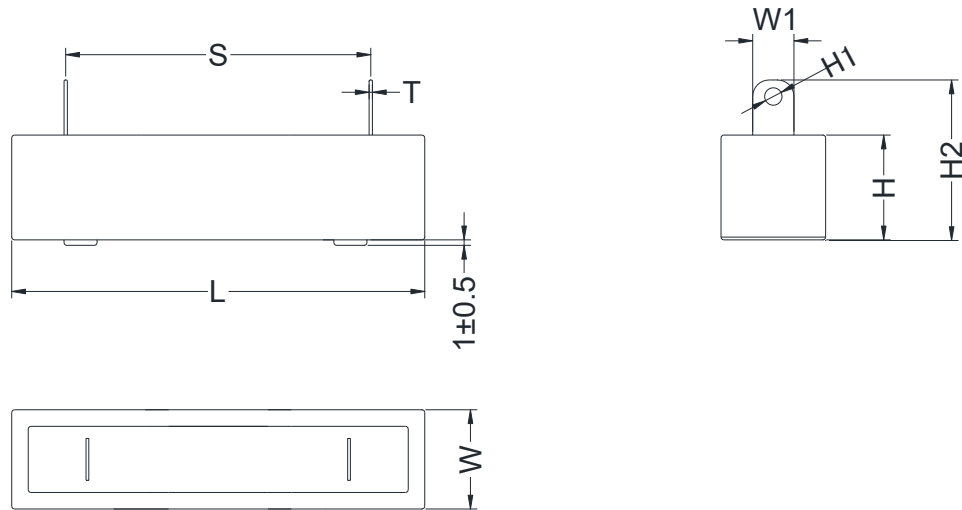
POWER RATING	Dimensions 寸法(mm)											Value Range	
	L \pm 2	H \pm 1.5	W \pm 1.5	S \pm 1.5	D \pm 1	h1 \pm 1	h2 \pm 1	P1 \pm 0.5	P2 \pm 0.5	P3 \pm 0.5	P4 \pm 0.5	Wire Wound	Metal oxide
5WS	25	9.5	9.5	10	0.5	24	9.5	4.6	2	7.2	1.45	0.1 Ω ~50 Ω	
5W	27	9.5	9.5	15	0.5	24	9.5	4.6	2	7.2	1.45	0.1 Ω ~100 Ω	100 Ω ~50K Ω
7W	35	9.5	9.5	22.5	0.5	24	9.5	4.6	2	7.2	1.45	0.1 Ω ~500 Ω	500 Ω ~50K Ω
10W	48	9.5	9.5	33	0.5	24	9.5	4.6	2	7.2	1.45	0.2 Ω ~500 Ω	500 Ω ~50K Ω
15W	48	12.5	12.5	32	0.5	35	15	6.8	5	10.3	3	0.5 Ω ~500 Ω	500 Ω ~50K Ω
20W	63	12.5	12.5	43	0.5	35	15	6.8	5	10.3	3	1 Ω ~500 Ω	500 Ω ~50K Ω

■ Dimensions



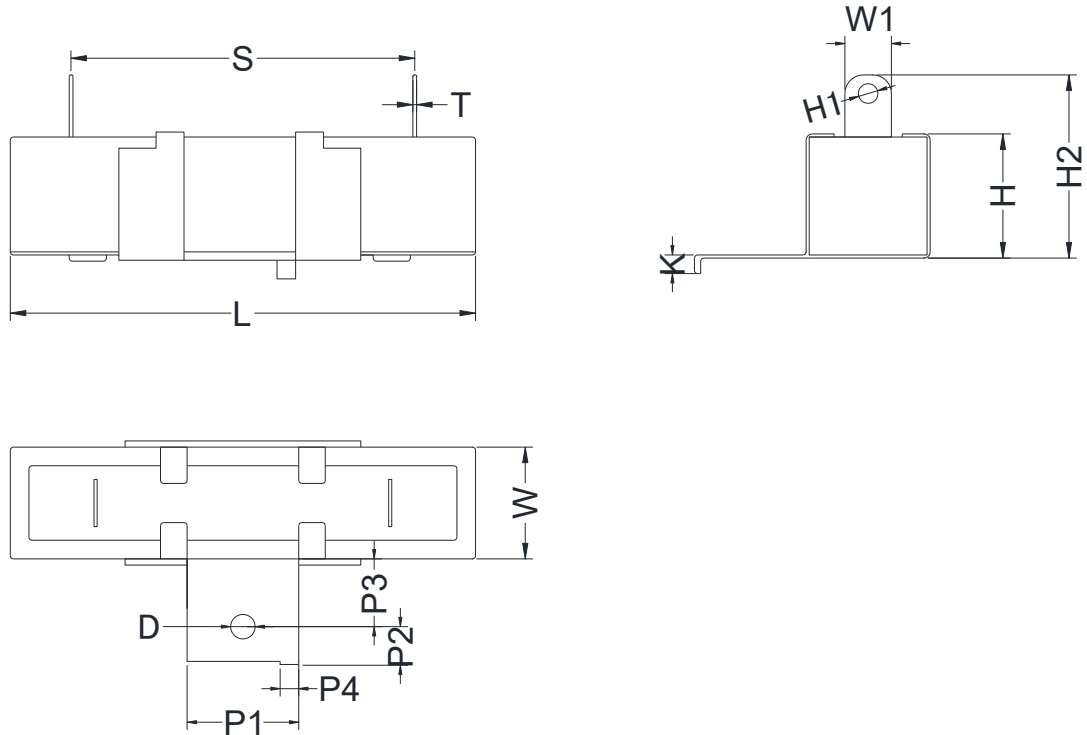
POWER RATING	Dimensions 寸法(mm)					Value Range		MAX WORKING VOLTAGE
	L±1.5	H±3	D±1	D1±1	d±1	Wire Wound	Metal oxide	
5W	22	27	10	9	1.5	0.1Ω~50Ω	50Ω~50K	350V
7W	35	27	10	9	3	0.1Ω~100Ω	100Ω~50K	500V
10W	48	27	10	9	3	0.1Ω~100Ω	100Ω~50K	750V
15W	48	27	12.5	12.5	3	0.1Ω~100Ω	100Ω~50K	750V
20W	60	27	13	14	5	0.1Ω~100Ω	100Ω~50K	750V
25W	60	27	13	14	5	0.1Ω~100Ω	100Ω~50K	750V

Dimensions



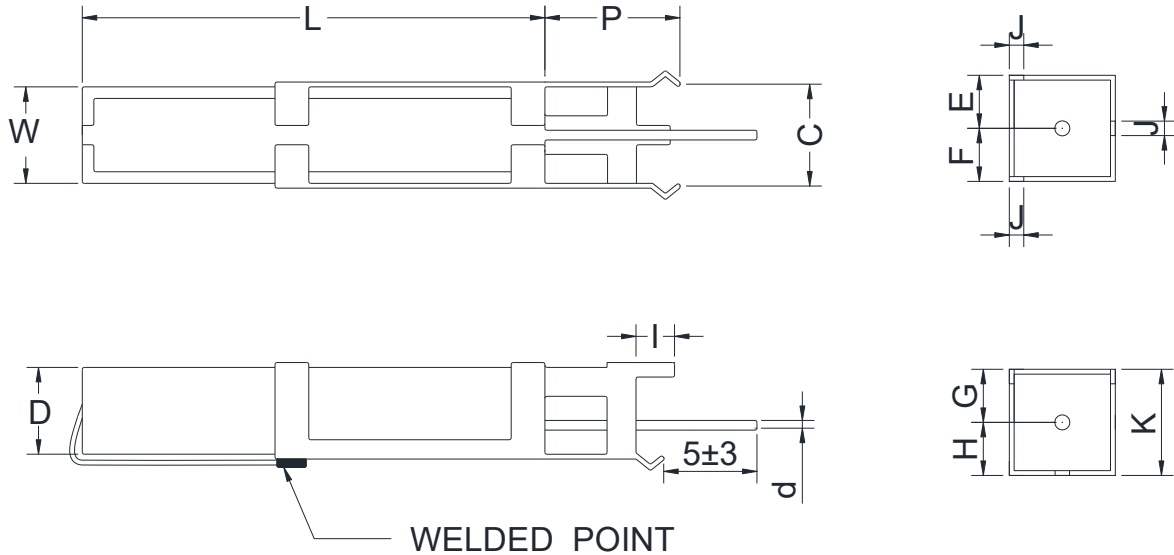
POWER RATING	Dimensions 寸法(mm)								Value Range	
	L±2	H±1.5	W±1.5	S±1.5	H1±1	H2±1.5	W1±1.5	T±1	Wire Wound	Metal oxide
10W	48	9.5	9.5	33	2.5	21	6	0.5	0.5 Ω ~ 100 Ω	100 Ω ~ 150K Ω
15W	48	12.5	12.5	32	2.5	21	6	0.5	1 Ω ~ 100 Ω	100 Ω ~ 150K Ω
20W	63	12.5	12.5	43	2.5	21	6	0.5	1 Ω ~ 100 Ω	100 Ω ~ 150K Ω
30W	75	19	19	56	2.5	30	8	0.5	1 Ω ~ 1K Ω	
40W	90	19	19	68	2.5	30	8	0.5	1 Ω ~ 1 KΩ	

■ Dimensions



POWER RATING	Dimensions 寸法(mm)														Value Range	
	L±2	H±1.5	W±1.5	S±1.5	H1±1	H2±1.5	W1±1.5	K±1	T±1	D±1	P1±1	P2±1	P3±1	P4±1	Wire Wound	Metal oxide
10W	48	9.5	9.5	33	2.5	21	6	2.2	0.5	4	12	6	8	3	0.5 Ω ~ 100 Ω	100 Ω ~ 150K Ω
15W	48	12.5	12.5	32	2.5	21	6	2.2	0.5	4	12	6	8	3	1 Ω ~ 100 Ω	100 Ω ~ 150K Ω
20W	63	12.5	12.5	43	2.5	21	6	2.2	0.5	4	12	6	8	3	1 Ω ~ 100 Ω	100 Ω ~ 150K Ω
30W	75	19	19	56	2.5	30	8	2.2	0.5	4	17	8	10	3	1 Ω ~ 1KΩ	
40W	90	19	19	68	2.5	30	8	2.2	0.5	4	17	8	10	3	1 Ω ~ 1KΩ	

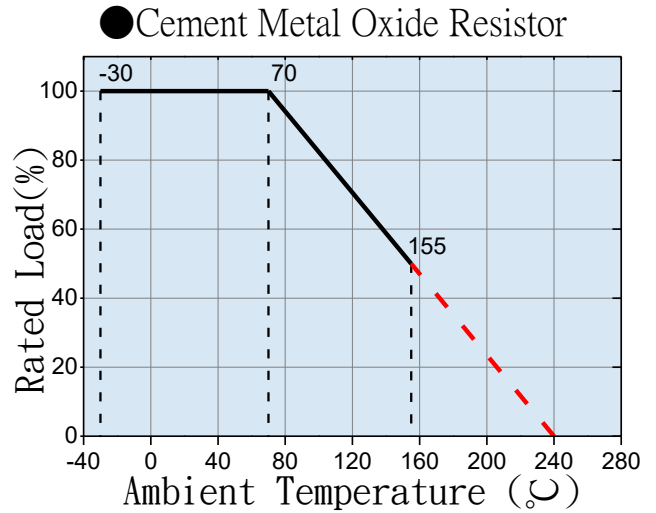
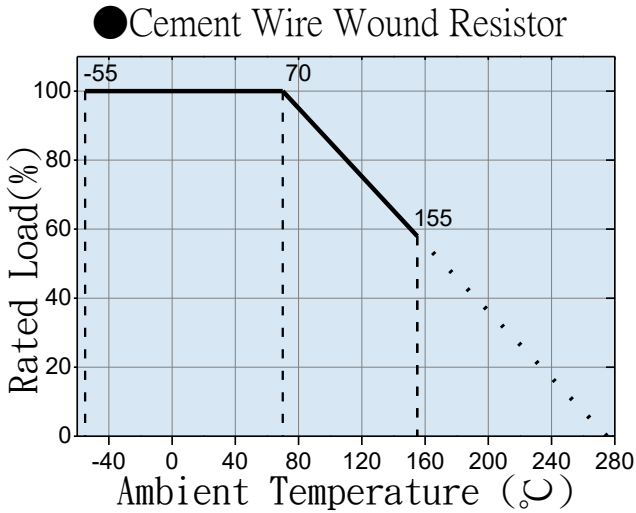
Dimensions



POWER RATING	Dimensions 寸法(mm)													Value Range	
	W±1.5	D±1.5	L±1.5	C±1.5	K±1.5	E±0.5	F±0.5	G±0.5	H±0.5	I±0.5	J±0.2	P±0.2	d±0.03	Wire Wound	Metal oxide
5W	10	9	22	10.5	10	5	5	4	4	4	1.5	5	0.78	0.1 Ω ~ 50 Ω	50 Ω ~ 50K Ω
7W	10	9	35	10.5	10	5	5	4	4	4	1.5	5	0.78	0.1 Ω ~ 100 Ω	100 Ω ~ 50K Ω
10W	10	9	48	10.5	10	5	5	4	4	4	1.5	10	0.78	0.1 Ω ~ 100 Ω	100 Ω ~ 50K Ω
20W	14	14	60	15	15	6.5	6.5	5.5	5.5	5.5	2.5	10	0.78	0.1 Ω ~ 100 Ω	100 Ω ~ 50K Ω
25W	14	14	60	15	15	6.5	6.5	5.5	5.5	5.5	2.5	10	0.78	0.1 Ω ~ 100 Ω	100 Ω ~ 50K Ω

Specifications given herein may be changed at any time without prior notice. Please confirm technical specifications before you order or use.

Power Derating Curve



Environmental characteristics

PERFORMANCE TEST	TEST METHOD	Wire Wound	Metal Oxide
Short time Over Load	JIS-C-5202 5.5 10 times RCWV for 5 seconds	$\pm(2\%+0.05\Omega)$	$\triangle R\pm(0.5\%+0.05\Omega)\text{MAX}$
TEMPERATURE COEF-FICIENT	Resistance value at room Temperature and room Temperature+100□	$\pm 400\text{ppm}$	$\triangle R\pm(0.5\%+0.05\Omega)\text{MAX}$
Load Life	JIS-C5202 7.10 70□ at RCWV for1000hrs.(1.5hrs. on · 0.5hrs.off)	$\pm(5\%+0.05\Omega)$	$\triangle R\pm(0.5\%+0.05\Omega)\text{MAX}$
LOAD LIFE IN HUMIDITY	JIS-C5202 7.9 40±2□ 90~95%RH at RCWV for1000hrs. (1.5hrs. on · 0.5hrs.off)	$\pm(5\%+0.05\Omega)$	$\triangle R\pm(1.5\%+0.05\Omega)\text{MAX}$
SOLDER ABILITY	JIS-C5202 6.5 235±5□ for 2±0.5 seconds	95% min. coverage	$\triangle R\pm(0.2\%+0.05\Omega)\text{MAX}$
PULSE OVERLOAD	JIS-C5202 5.8	$\pm(1\%+0.05\Omega)$	$\pm(1\%+0.05\Omega)$
	4 times RCWV for10000cycles(1sec.on · 25secs.off)		
Dielectric Withstanding volt		MAX.1000V	MAX.1000V

$$\text{Rated continuous Working Voltage (RCWV)} = \sqrt{\text{POWER.RATING.} * \text{RESISTANCE.VALUE}}$$

Specifications given herein may be changed at any time without prior notice. Please confirm technical specifications before you order or use.

Ordering information

SQP	10W	5K	J
Type	Power rating	Resistance	Tolerance
SQP Type	10W	1Ω	F ± 1%
SQM Type	20W	10Ω	G ± 2%
SQH Type	30W	1K	J ± 5%
SQS Type	40W	10K	K ± 10%
			M ± 20%