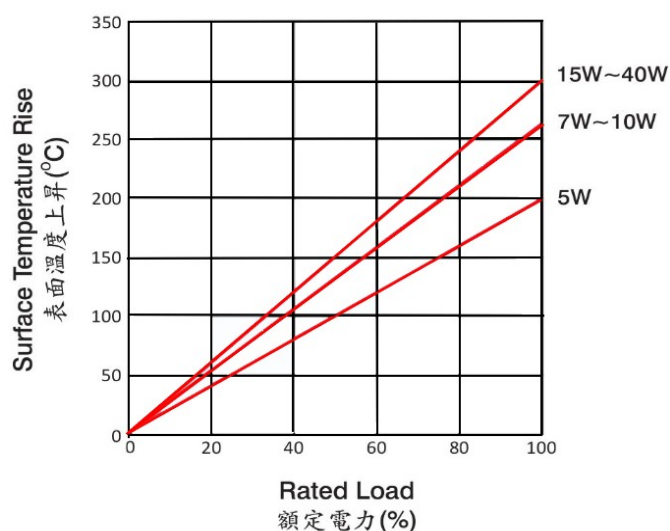


WIREWOUND RESISTORS RECTANGULAR TYPE

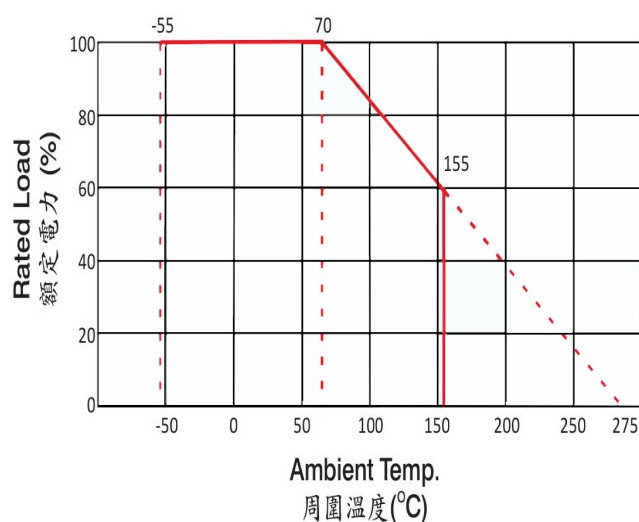
1. As applying non-flammable materials, even if over current flows, there will be no self-ignition occurred.
2. Completely insulated character suitable for Printed circuit board mounting
3. Precise resistance value with long life proof.
4. Super heat dissipation; small linear temperature coefficient
5. Instant overload capability; low noise figure and without annual shift on resistance value.
6. For higher resistance value, the winding core is replaced by Metal Oxide Film cutting core (MO)



Temperature Rise



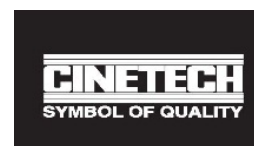
Derating Curve



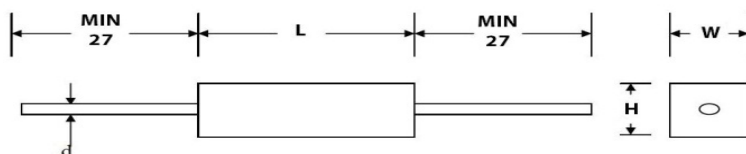
Test Items	Condition	Spec.
Resistance Temp.Coeff.	-55°C~+155°C	* ± 300 ppm/°C
Short Time Over Load	* 5 times of rated wattage for 5 sec.	±2%
Rated Load	Rated wattage 30 min.	±1%
Voltage Durability	1,000V AC 1 min.	not changed
Insulation Resistance	500V megger	500MΩ
Temp. Cycle	- 30°C ~ + 85°C for 5 cycles	±1%
Load Life	70°C on-off cycle 1,000 hrs.	±5%
Moisture-Proof Load Life	40°C 95% RH on-off cycle 1000 hrs.	±3%
Incombustibility	16 times of rated wattage for 5 min.	not flamed

*Lower TCR available upon request.

*Applicable for wirewound elements only.



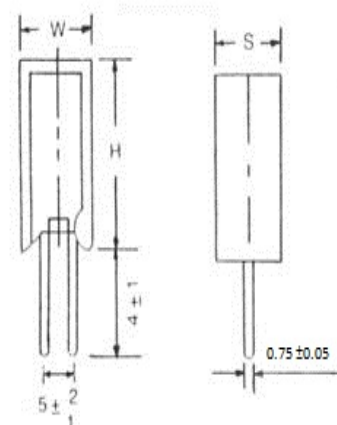
SQP TYPE



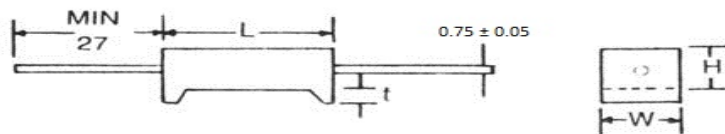
SQP	Dimension(mm)				Resistance Range(Ω)		Max Working Voltage
	L ± 1.5	W ± 1.0	H ± 1.0	d ± 0.05	Wire Wound	MO	
2W	18.0	7.0	7.0	0.75	0.1~50 Ω	51~200K Ω	150V
3W	22.0	8.0	8.0	0.75	0.1~50 Ω	51~500K Ω	350V
5W	22.0	9.5	9.0	0.75	0.1~50 Ω	51~500K Ω	350V
7W	35.0	9.5	9.0	0.75	0.1~500 Ω	501~100K Ω	500V
10W	48.0	9.5	9.0	0.75	0.1~500 Ω	501~100K Ω	500V
15W	48.0	12.5	12.0	0.75	0.1~1K Ω	1k1~100K Ω	500V
20W	60.0	14.0	13.5	0.75	0.1~1K Ω	1k1~100K Ω	500V
25W	60.0	14.0	13.5	0.75	0.1~1K Ω	1k1~100K Ω	1000V
30W	77.0	18.0	17.0	0.75	0.1~1K Ω		1000V
40W	90.0	19.0	18.0	0.75	0.1~1K Ω		1000V
50W	90.0	19.0	18.0	0.75	0.1~1K Ω		1000V

SQM TYPE

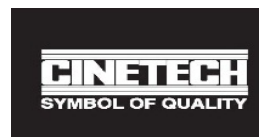
Type	Dimension(mm)			Resistance Range(Ω)	
SQM	H ± 1.5	W ± 1	S ± 1	Wire Wound	MO
2W	20	11	7.5	0.1~50 Ω	51~500 Ω
3W	25	12	9	0.1~50 Ω	51- 47K Ω
5W	25	13	9	0.1~50 Ω	51- 47K Ω
7W	39	13	9	0.1~500 Ω	501- 47K Ω
10W	51	13	9	0.1~500 Ω	501- 47K Ω
10WS	35	16	12	0.1~500 Ω	501- 47K Ω



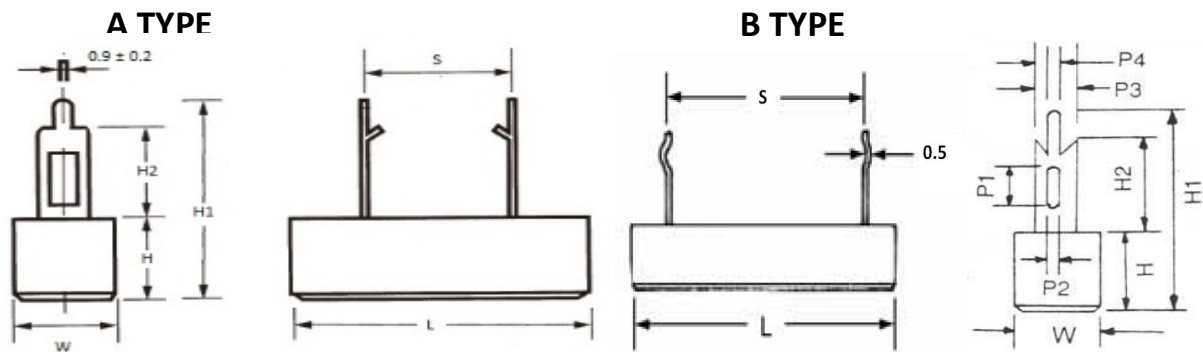
SQT TYPE



Type	Dimension(mm)				Resistance	Range(Ω)
SQT	W ± 1	H ± 1	L ± 1.5	t ± 1.5	Wire Wound	MO
5W	10	9	22	1.5	0.1~50 Ω	51 Ω ~47K Ω
7W	10	9	35	3	0.1~500 Ω	501~47K Ω
10W	10	9	48	3	0.1~500 Ω	501~47K Ω
15W	12.5	12.5	48	3	0.1~500 Ω	501~47K Ω
20W	13	14	60	5	0.1~500 Ω	501~47K Ω

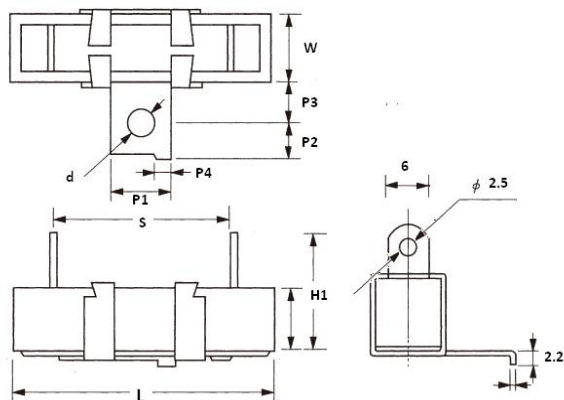


SQZ TYPE

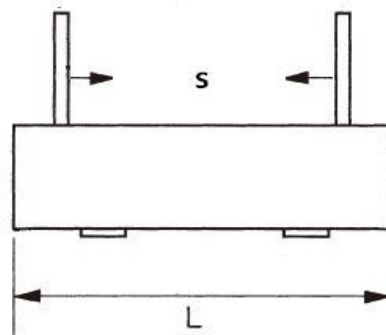


Type A+B	Power Rating (W)	Resistance Range(Ω)		Dimension(mm)									
		Wire Wound	MO	L ± 2	H ± 1	W ± 1	S ± 1.5	H1 ± 1	H2 ± 1	P1	P2	P3	P4
SQZ-5	5	0.1Ω~200Ω	201Ω50KΩ	27.0	9.5	9.5	15.0	24(30)(40)	9.5(15)(25)	4.0	2.0	7.5	1.5
SQZ-7	7	0.1Ω~200Ω	201Ω100KΩ	35.0	9.5	9.5	22	24(30)(40)	9.5(15)(25)	4.0	2.0	7.5	1.5
SQZ-10	10	0.2Ω~500Ω	501Ω100KΩ	48.0	9.5	9.5	33	24(30)(40)	9.5(15)(25)	4.0	2.0	7.5	1.5
SQZ-15	15	0.5Ω~600Ω	601Ω100KΩ	48.0	12.5	12.5	33	34.5	15.0	7.0	6.0	10.0	2.7
SQZ-20	20	0.5Ω~1KΩ	1.1KΩ100KΩ	63.5	12.5	12.5	42	34.5	15.0	7.0	6.0	10.0	2.7
SQZ-3S	3	0.1Ω~50Ω	—	22.0	9.5	9.5	10.0	23.0	12.0	4.0	2.0	7.5	1.5
SQZ-5S	5	0.1Ω~50Ω	—	25.0	9.5	9.5	10.0	24.0	12.0	4.0	2.0	7.5	1.5

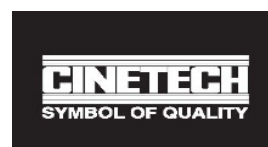
SQHG TYPE



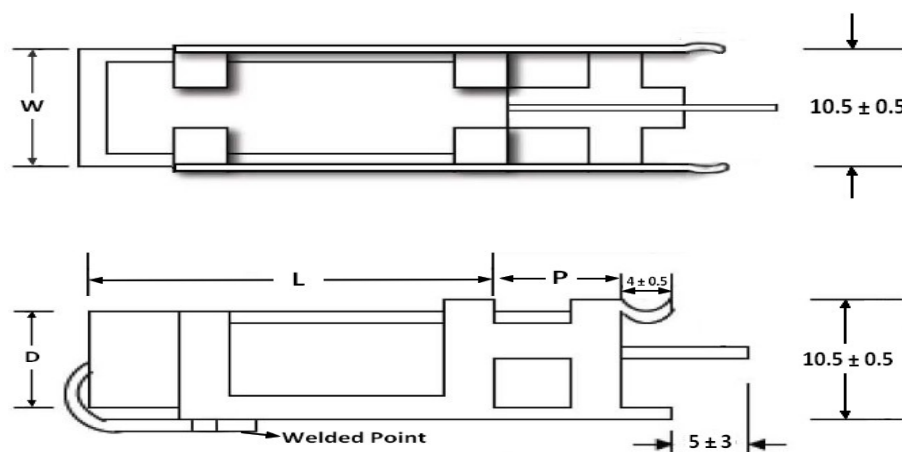
SQH TYPE



Type A+B	Power Rating (W)	Resistance Range(Ω)		Dimension(mm)									
		Wire Wound	MO	L ± 2	H ± 1	W ± 1	S ± 1	H1 ± 1	P1 ± 1	P2 ± 1	P3 ± 1	P4 ± 1	d
SQH-10	10	0.5Ω~500Ω	501Ω - 50KΩ	48.0	10.0	10.0	33	21	12	6	8.0	3.0	4
SQH-15	15	0.5Ω~600Ω	601Ω - 150KΩ	48.0	12.0	12.0	33	21	12	6	8.0	3.0	4
SQH-20	20	0.5Ω~1KΩ	1.1KΩ-150KΩ	63.7	12.0	12.0	42	24	12	6	8.0	3.0	4
SQH-30	30	0.1Ω~2KΩ	—	75.0	19.0	18.0	56	30	17	8	10.0	3.0	4
SQH-40	40	0.1Ω~2KΩ	—	90.0	19.0	18.0	68	30	17	8	10.0	3.0	4



SPS TYPE



Type	Dimension(mm)				Resistance Range	
	W ±1	D ±1	L ±1	P ±1	Wire Wound	MO
SPS-5	10	9	22	5	0.1Ω~50Ω	51Ω~50KΩ
SPS-7	10	9	35	10	0.1Ω~500Ω	501Ω~50KΩ
SPS-10	10	9	48	10	0.1Ω~500Ω	501Ω~50KΩ
SPS-15	10	13	48	10	0.1Ω~1KΩ	1K1Ω~150KΩ
SPS-20	10	13	60	10	0.1Ω~1KΩ	1K1Ω~150KΩ

Parts Number System

SQP	—	5W	101	J	B
Type of Cement Resistor	Wattages	Resistance		Tolerance	Packing Code
		3 Digit code for 5% tolerance 101=100Ω R10=0.1Ω 4R7=4.7Ω 4 Digit code for 1% tolerance		J = ±5% F = ±1%	B=Bulk Pack

