

特點

1. 體積小，耐震，耐濕及良好散熱，低價格。
2. 完全絕緣，適用於印刷電路板。
3. 散熱性佳，溫度系數小且呈線性變化。
4. 耐短時間超負載：低雜音，阻值經年無變化。

Features

1. Small dimension, excellent stability in high temperature, resistant to humidity and shock.
2. Completely insulated character suitable for printed circuit board.
3. Super heat dissipation ; small linear temperature coefficient.
4. Instant overload capability ; low noise figures and low annual shift on resistance values.

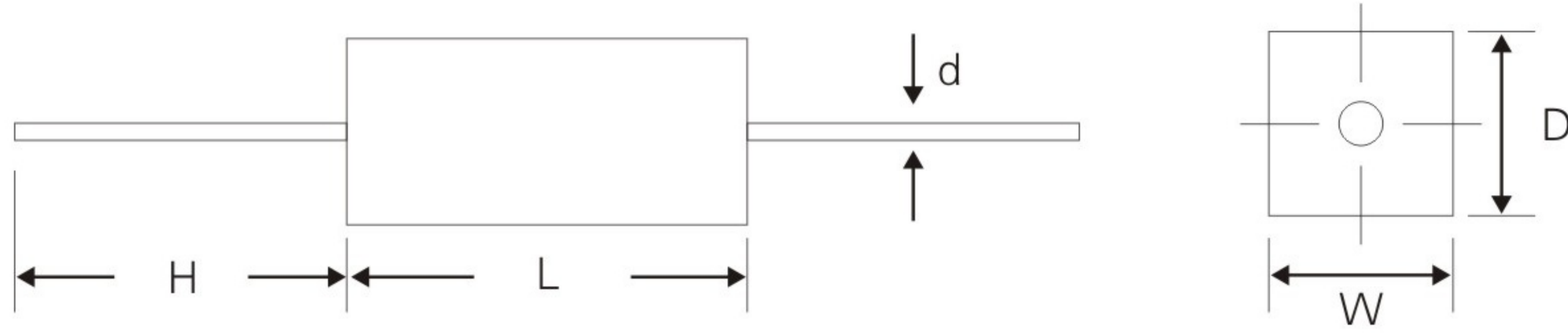
電氣及機械特性 ELECTRICAL AND MECHANICAL PERFORMANCE

特性 Characteristics	規格值 Standards	試驗方法 Test Methods
阻值容許誤差 Resistance Tolerance	± 5% (J) or ± 1% (F)	-
溫度系數 Resistance Temp. Coeff.	± 300 ppm/°C, < 1Ω : ± 600 ppm/°C。	-55°C ~ 155°C
額定負載 Power Rating Load	Surface temp. 275°C Max. 最高表面溫度 275°C, ΔR/R ≤ ± 1%	Rated voltage for 30 minutes 額定電壓/30分鐘
短時間過負載 Short Time Overload	± 2%	10 times (power film: 5 times) of rated wattage for 5 seconds. 10 倍額定功率(皮膜型 5 倍額定功率)/5 秒
耐電壓 Dielectric Withstanding Voltage	No evidence of mechanical damage or insulation breakdown. 無機械性能損壞及絕緣擊穿現象	AC 1000V for 1 minutes 施加 AC 1000V 電壓 1 分鐘
絕緣電阻 Insulation Resistance	1,000MΩ	DC 500V megger
端子強度 Terminal Strength	No evidence of mechanical damage 無機械性能損壞現象	4.5kg
焊錫性 Solder-ability	Minimum 95% coverage 焊錫面積 ≥ 95%	235 ± 5°C for 2 seconds
浸錫耐熱性 Resistance to Soldering Heat	No evidence of mechanical damage. 無機械性能損壞現象, ΔR/R ≤ ± 1%	265 ± 5°C for 10 ± 1 seconds

耐環境特性 ENVIRONMENTAL CHARACTERISTICS

特性 Characteristics	規格值 Standards	試驗方法 Test Methods
溫度週率 Temp. Cycle	ΔR/R ≤ ± 1%	-55°C (30 min.) → Room Temp. (3 min.) → +155°C (30 min.) → Room Temp. (3 min.) / (5 cycles)
負載壽命 Load Life	ΔR/R ≤ ± 5%	Rated power load 90 minutes ON 30 minutes OFF 70°C 1000 hours
耐濕壽命 Moisture-proof Load Life	ΔR/R ≤ ± 5%	Rated power load 90 minutes ON 30 minutes OFF 40°C 95% RH 1000 hours
不燃性 Nonflammability	not flamed	16 times of rated wattage for 5 min

Axial Leaded Type SQP Series 軸式導綫形 SQP 系列



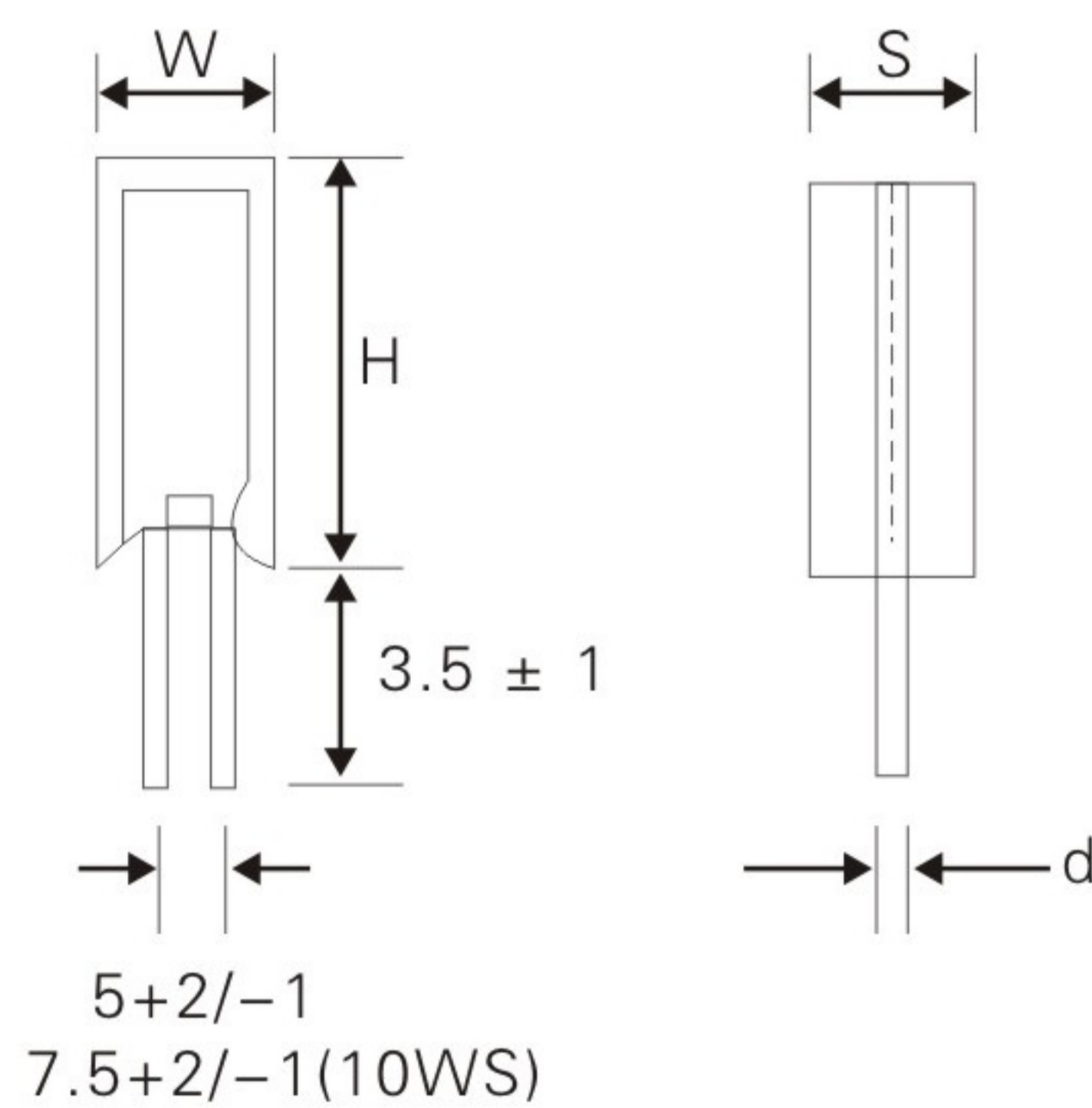
Unit : mm

Rated Wattage	W ± 1	D ± 1	L ± 1.5	H ± 3	d ± 0.1	Resistance (Ω)		Max. Working Voltage
						Wire Wound	Power Film	
2W	7	7	18	23	0.65	0.1~100	101~10K	150V
3W	8	8	22	35	0.8	0.1~150	151~33K	350V
5W	10	9	22	35	0.8	0.1~150	151~50K	350V
7W	10	9	35	35	0.8	0.1~430	431~50K	500V
10W	10	9	48	35	0.8	0.1~470	471~50K	750V
15W	12.5	11.5	48	35	0.8	0.5~600	601~150K	1000V
20W • 25W	14	13.5	60	35	0.8	0.5~1K	1.1K~150K	1000V

Note: 1. Max. Overload Voltage is 2 times of Max. Working Voltage.

2. Max. Working Voltage is applying for all SQ types.

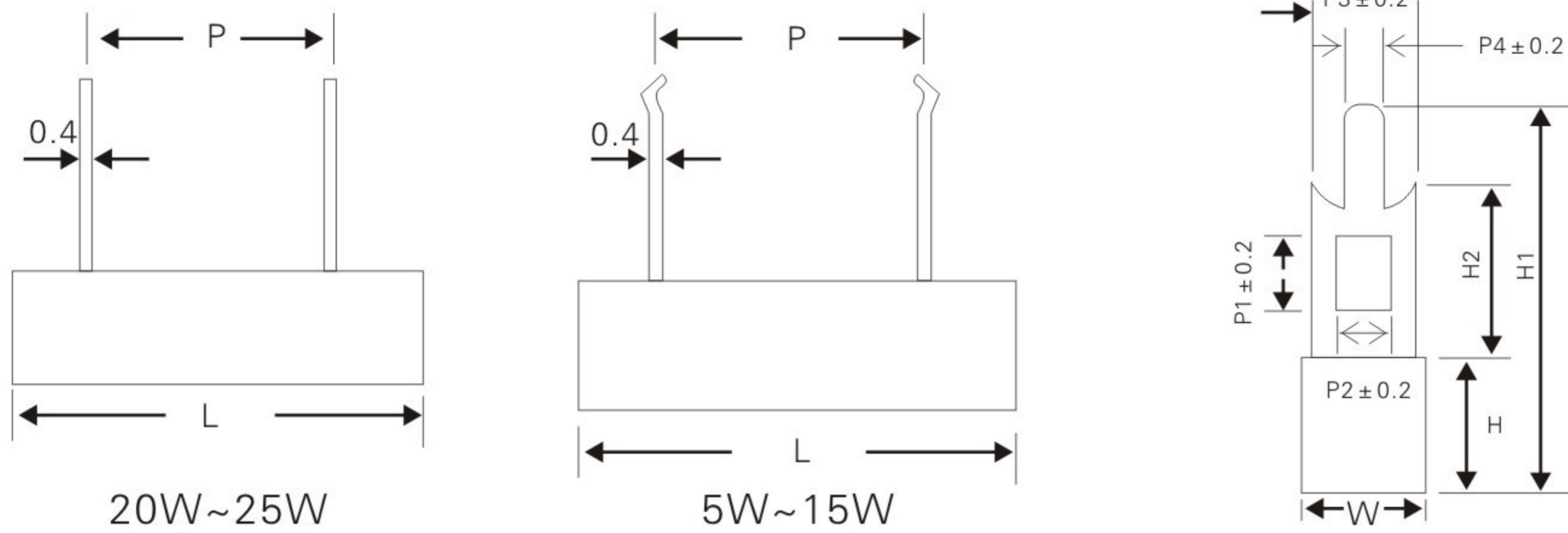
Radial Leaded Type SQM Series 立式導綫型 SQM 系列



Unit : mm

Rated Wattage	H ± 1.5	W ± 1	S ± 1	d ± 3	Resistance (Ω)		Max. Working Voltage
					Wire Wound	Power Film	
1W	10	10	5	0.6	0.1~47	48~10K	150V
2W	20	11	7	0.65	0.1~82	82~10K	150V
3W	25	12	8	0.8	0.1~150	151~50K	350V
5W	25	13	9	0.8	0.1~150	151~50K	350V
7W	39	13	9	0.8	0.1~430	431~50K	500V
10WS	35	16	12	0.8	0.1~300	301~100K	750V
10W	52	13	9	0.8	0.1~470	471~75K	750V

Radial Terminal Type SQZ Series 立式端子型 SQZ 系列



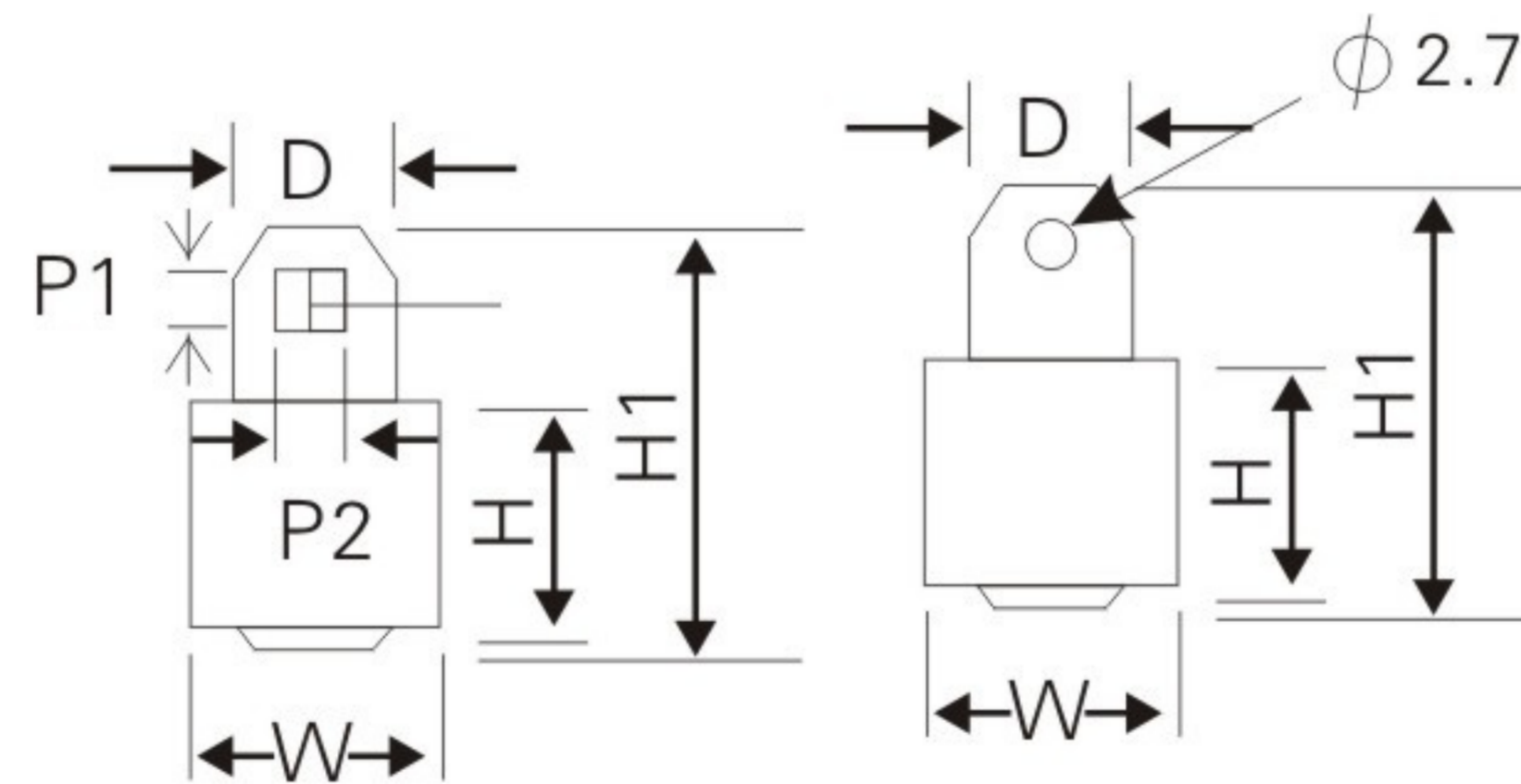
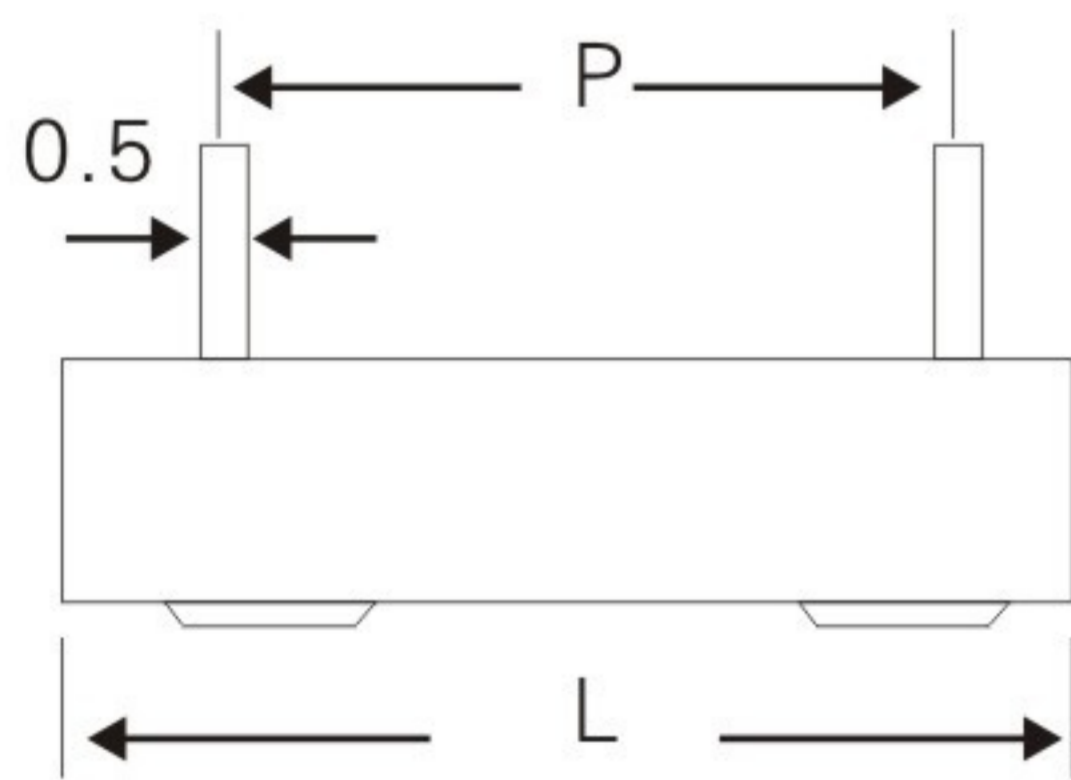
Unit : mm

Rated Wattage	L±1.5	W±1	H±1	P±1.5	P1	P2	P3	P4	H1	H2	Resistance Range(Ω)	
											Wire Wound	Power Film
5WS	25	10	10	9.5	4.2	2	5	1.5	25	10	0.1~130	131~50K
5W	28	10	10	15	4.2	2	5(5)(7.5)	1.5	25(30)(40)	10(15)(25)	0.1~130	131~50K
7W	36	10	10	20	4.2	2	5(5)(7.5)	1.5	25(30)(40)	10(15)(25)	0.1~430	431~50K
10W	48	10	9	32	4.2	2	5(5)(7.5)	1.5	25(30)(40)	10(15)(25)	0.2~470	471~50K
15W	48	12.5	12	32	4.2	2	5	1.5	27	10	1~600	601~150K
20W.25W	60	15	15	42	7	5	10	2.7	32	15	1~1K	1.1K~150K

Radial Terminal Type SQH Series
立式端子型 SQH 系列

SQHG Series(With metal mounting bracket)
SQHG 系列 (帶安裝金屬架)

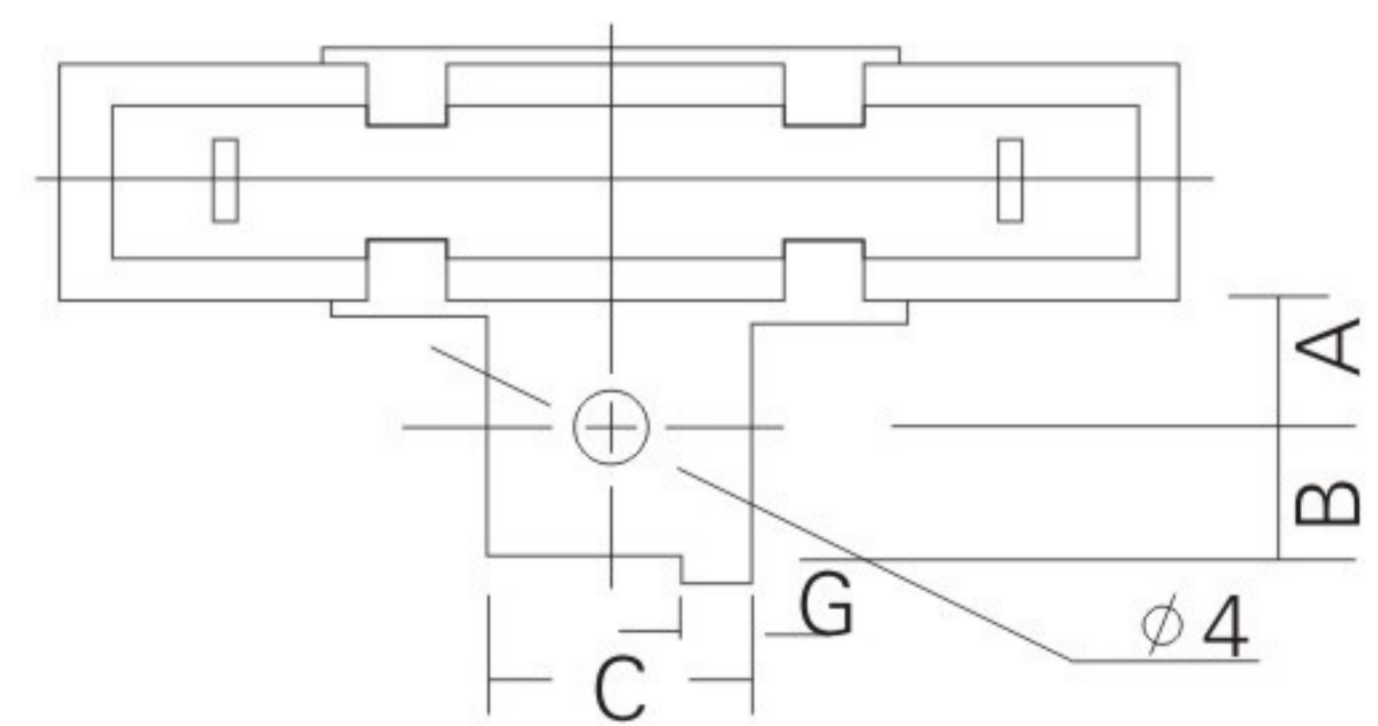
SQH type:



10W. 15W

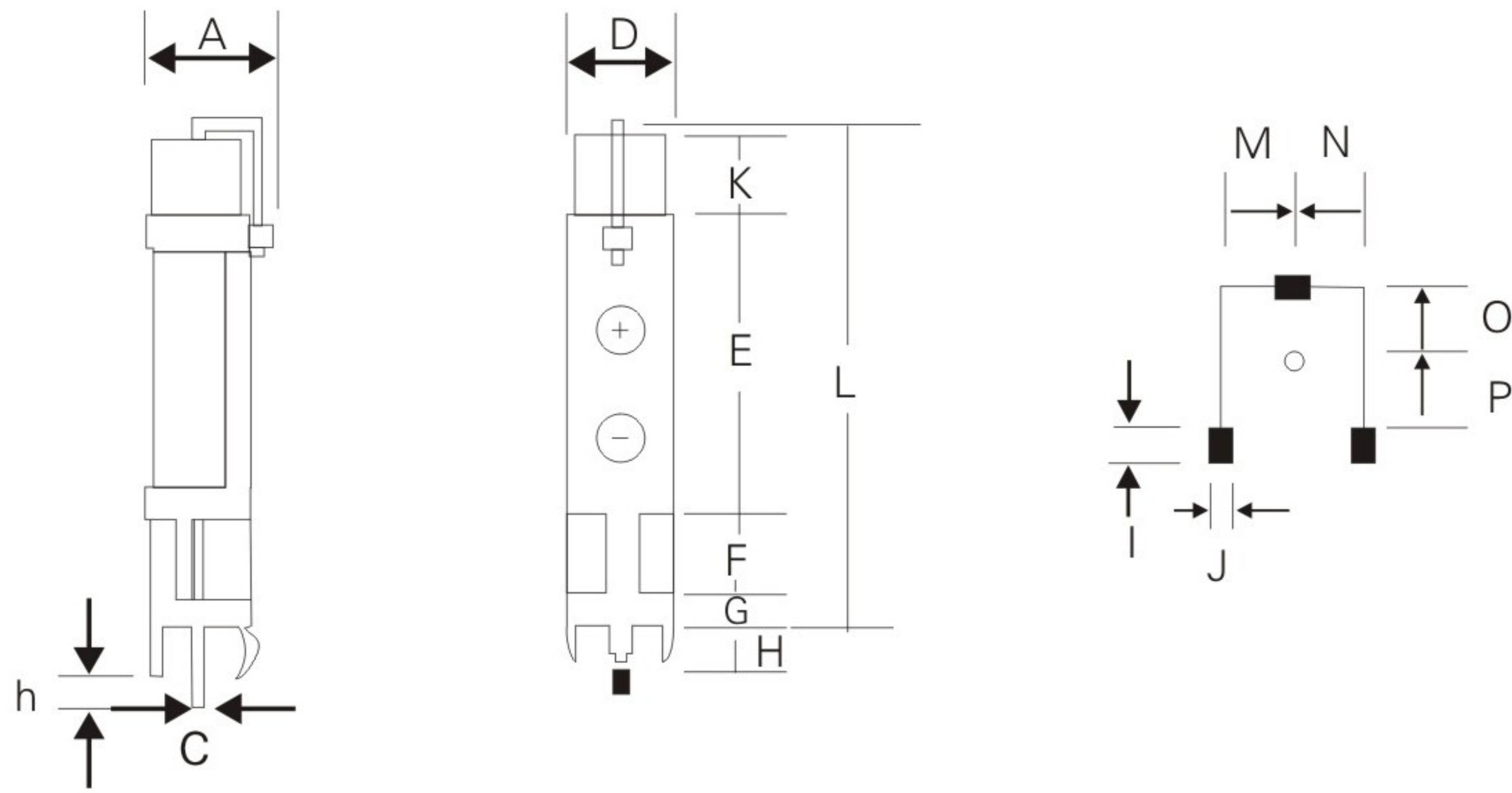
20~40W

SQHG type:



Rated Wattage	W±1	H±1	L±1.5	P	H1±1	D±0.5	P1±0.2	P2±0.2	A±0.5	B±0.5	C±0.5	G±0.5	Resistance Range(Ω)	
													Wire Wound	Power Film
10W	10	9	48	32±1	21	5	2.5	1.7	8	5	12	3	0.5~600	601~50K
15W	12.5	11.5	48	32±1	21	5	2.5	1.7	8	5.5	12	3	1~600	601~150K
20W	14.5	13.5	60	42±1	24	6	3	2.5	8	5.5	12	3	1~1K	1.1K~150K
30W	19	19	75	55±2	31	7.5	-	-	10.5	8	18	3.5	1~2K	-
40W	19	19	90	67±2	31	7.5	-	-	10.5	8	18	3.5	1~2K	-

Radial Leaded Type SPS Series 立式導綫型 SPS系列

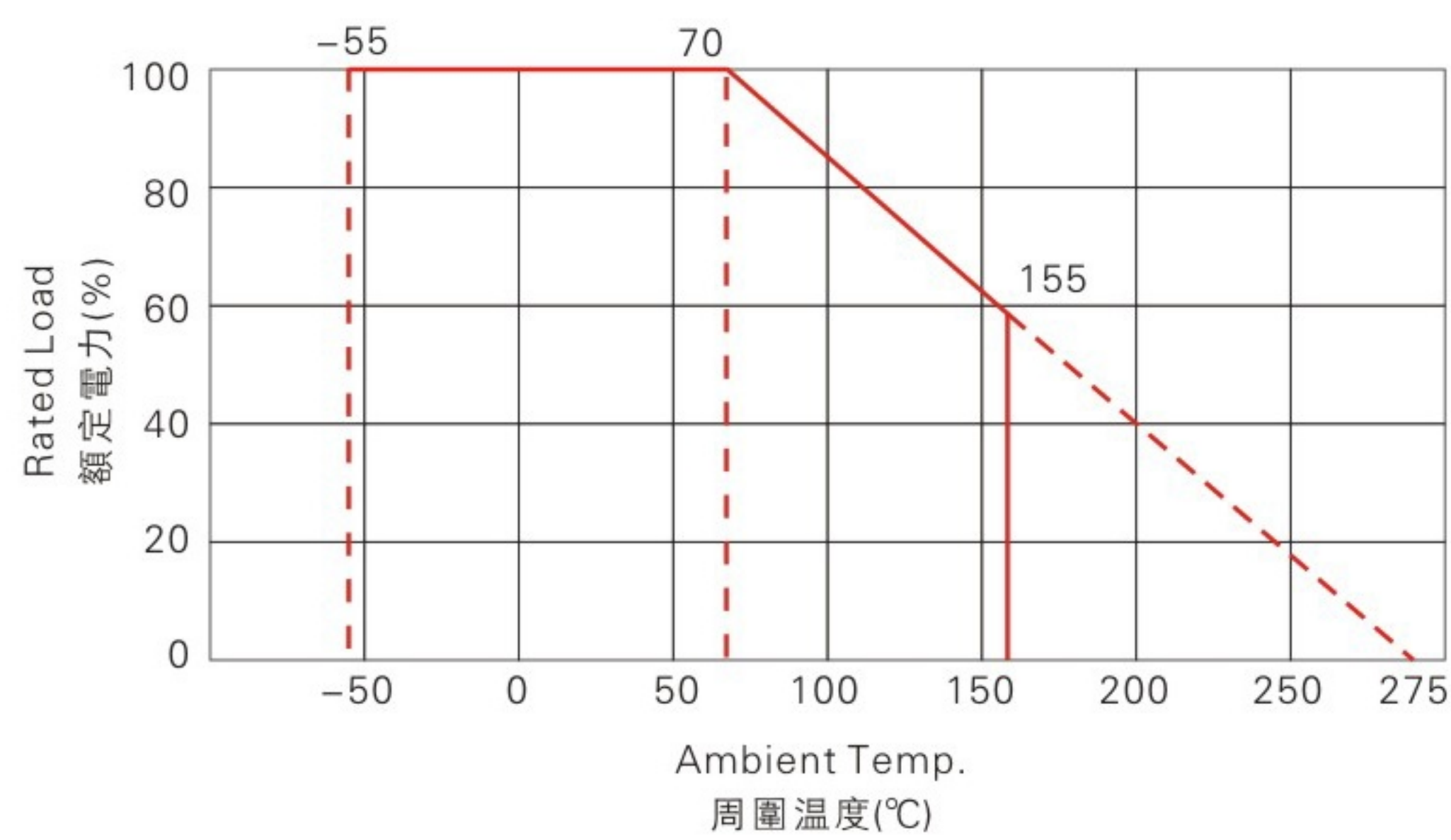


Unit : mm

Rated Wattage	A ± 1	C ± 0.1	D ± 1	E ± 0.5	F ± 0.5	G ± 0.2	H ± 0.3	I ± 0.1	J ± 0.1	K ± 1	L ± 1.5	M ± 0.5	N ± 0.5	O ± 0.5	P ± 0.5	h ± 0.5	Resistance Range(Ω)	
																	Wire Wound	Power Film
7W	12	0.8	11	28	7	3	4	1.5	0.5	7.5	46	5	5	5	5	2	0.1~430	431~50K
10W	12	0.8	11	28	7	3	4	1.5	0.5	20	60	5	5	5	5	2	0.1~470	471~50K

電力輕減曲綫 Derating Curve

For resistors operated in ambient temperatures above 70°C, power rating must be derated in accordance with the curve below.



表面溫度上升曲綫 Surface Temperature Rise

