

TYPE:SQP,SQZ,SQM,SPS,SQH,SQHG

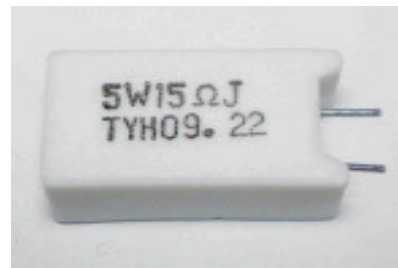
SQP



SQZ



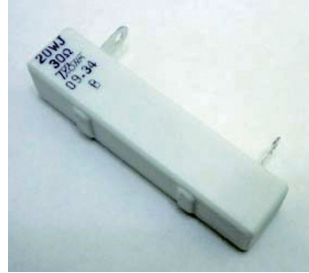
SQM



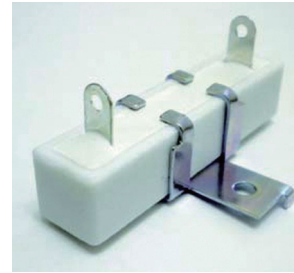
SPS



SQH



SQHG



Features

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

特性

- 體積小,耐震,耐濕及良好散熱,低價格
- 完全絕緣,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皮膜體代替繞線方式
- 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

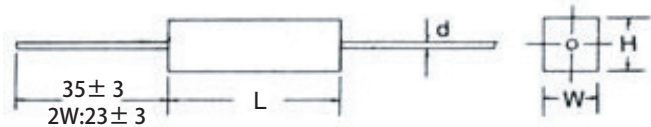
HOW TO ORDER 訂貨方式

SQP 5W 0.1Ω J  
a b c d

- a. common code for cement resistors
- b. rated power
- c. resistance value
- d. tolerance(J : ±5%)

- a. 名稱
- b. 額定電力
- c. 電阻值
- d. 容許誤差

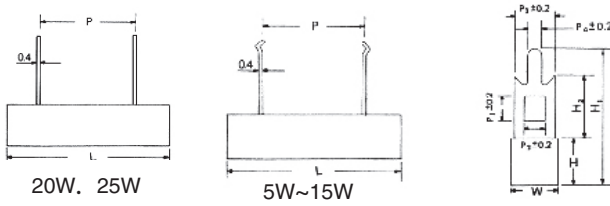
SQP DIMENSIONS 尺寸



Type	Dimension(mm)				Resistance Range (Ω)		MAX Working Voltage
	W±1	H±1	L±1.5	d ± 0.1	Wirewound	Power Film	
2W	7	7	18	0.65	0.1-100	101-10K	150V
3W	8	8	22	0.8	0.1-150	151-33K	350V
5W	10	9	22	0.8	0.1-150	151-50K	350V
7W	10	9	35	0.8	0.1-430	431-50K	500V
10W	10	9	48	0.8	0.1-470	471-50K	750V
15W	12.5	11.5	48	0.8	0.5-600	601-150K	1000V
20W. 25W	14	13.5	60	0.8	0.5-1K	1.1K-150K	1000V

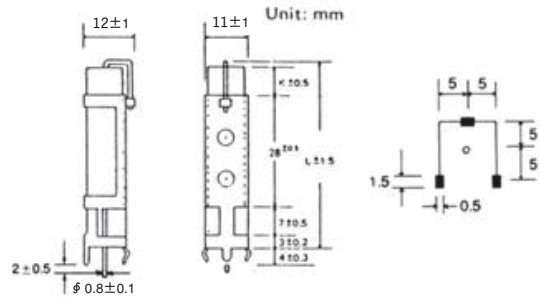
Rated Continuous Working Voltage(RCWV)shall be determined from  $RCWV = \sqrt{\text{Rated Power} \times \text{Resistance Value}}$  or Max. Working Voltage listed above, whichever less

- Note:
- Max Overload Voltage is 2 times of Max Working Voltage
  - Too low or too high ohmic values can be supplied only case by case
  - Max Working Voltage is applying for all SQ types
  - Power Film means cutting resistance values instead of wound by resistance wires
  - Non-Inductive types are also supplied

**SQZ**


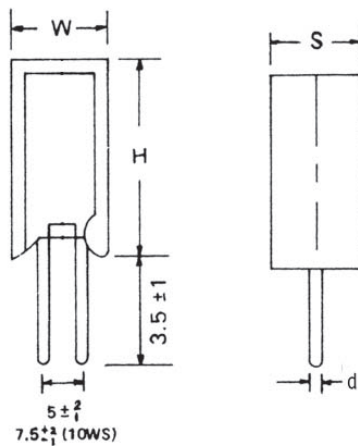
TYPE	Dimension(mm)										Resistance Range( $\Omega$ )	
	L $\pm 1.5$	W $\pm 1$	H $\pm 1$	P $\pm 1.5$	P1	P2	P3	P4	H1 $\pm 1$	H2 $\pm 1$	Wirewound	Power Film
5WS	25	10	10	9.5	4.2	2	5	1.5	25	10	0.1-130	131-50K
5W	28	10	10	15	4.2	2	*	1.5	25(30)(40)	10(15)(25)	0.1-130	131-50K
7W	36	10	10	20	4.2	2	*	1.5	25(30)(40)	10(15)(25)	0.1-430	431-50K
10W	48	10	9	32	4.2	2	*	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	13	42	7	5	10	2.7	32	15	1-1K	1.1K-150K

Note : “\*” means 5(5)(7.5)

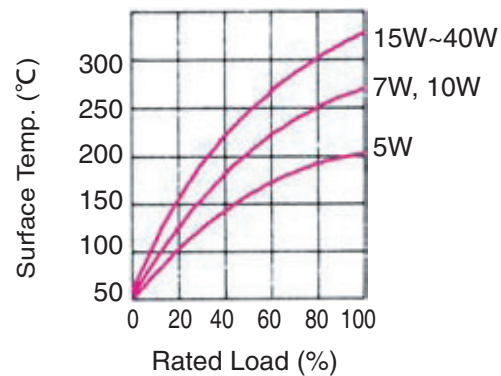
**SPS**


TYPE	Dimension(mm)		Resistance Range( $\Omega$ )	
	L $\pm 1.5$	K $\pm 1$	Wirewound	Power Film
7W	46	7.5	0.1~430	431~50K
10W	60	20	0.1~470	471~50K

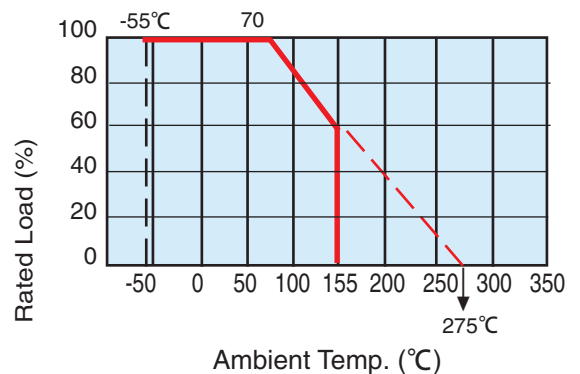
Note : We also provide 20W, contact us for details.

**SQM**


TYPE	Dimension(mm)				Resistance Range( $\Omega$ )	
	H $\pm 1.5$	W $\pm 1$	S $\pm 1$	d $\pm 0.1$	Wirewound	Power Film
1W	10	10	5	0.6	0.1 ~ 47	48 ~ 10K
2W	20	11	7	0.65	0.1 ~ 82	83 ~ 10K
3W	25	12	8	0.8	0.1 ~ 150	151 ~ 50K
5W	25	13	9	0.8	0.1 ~ 150	151 ~ 50K
7W	39	13	9	0.8	0.1 ~ 430	431 ~ 50K
10WS	35	16	12	0.8	0.1 ~ 300	301~100K
10W	52	13	9	0.8	0.1 ~ 470	471 ~ 75K

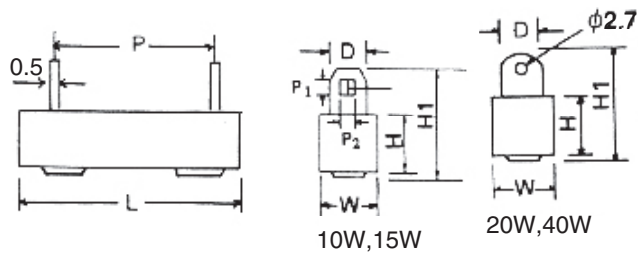
**RATED LOAD VS. SURFACE TEMP.**

**DERATING CURVE 電力遞減曲線**

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



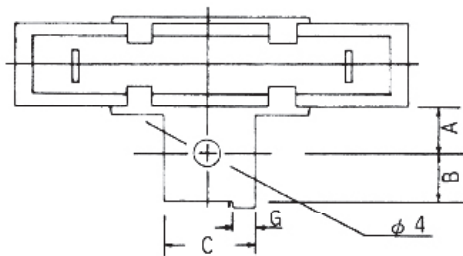
水泥型電阻器

SQH



TYPE	Dimension(mm)								Resistance Range	
	W±1	H±1	L±1.5	P	H1±1	D±0.5	P1±0.2	P2±0.2	Wirewound	Power Film
10W	10	9	48	32 ± 1	21	5	2.5	1.7	0.5 Ω ~ 600 Ω	601 Ω ~ 50K Ω
15W	12.5	11.5	48	32 ± 1	21	5	2.5	1.7	1 Ω ~ 600 Ω	601 Ω ~ 150K Ω
20W	14.5	13.5	60	42 ± 1	24	6	-	-	1 Ω ~ 1 K Ω	1.1K Ω ~ 150K Ω
30W	19	19	75	55 ± 2	31	7.5	-	-	1 Ω ~ 2 K Ω	-
40W	19	19	90	67 ± 2	31	7.5	-	-	1 Ω ~ 2 K Ω	-

SQHG



BRACKET SIZE

TYPE	Dimension(mm)			
	A±0.5	B±0.5	C±0.5	G±0.5
10W	8	5	12	3
15W, 20W	8	5.5	12	3
30W, 40W	10.5	8	18	3

ELECTRICAL PERFORMANCE

Test Items	Condition	Spec.	Test Method
溫度係數 Resistance Temp. Coeff.	-55°C ~ 155°C	±300ppm/°C	JIS-C-5201
短時間超負載 Short Time Overload	10 times of rated wattage for 5 sec.	± 2 %	
額定負載 Rated Load	Rated wattage for 30 min.	± 1 %	
耐電壓 Dielectric Withstanding Voltage	1,000V AC 1min.	no change	
絕緣性 Insulation Resistance	500V megger	1,000MΩ	
負載壽命 Load Life	70°C on-off cycle 1,000 hours	± 5 %	
耐濕壽命 Moisture-proof Load Life	40°C 95% RH on-off cycle 1,000 hours	± 5 %	
不燃性 Nonflammability	16 times of rated wattage for 5 min.	not flamed	

Note: ■ Too low or too high ohmic values can be supplied only case by case  
 ■ Max Overload Voltage is 2 times of Max Working Voltage  
 ■ "Power Film" short time overload is 5 times of rated wattage for 5 sec.