



### 特點

1. 功率大、體積小。
2. 散熱性佳，溫度係數小且呈綫性變化。
3. 耐短時間超負載；低雜音，阻值經年無變化。
4. 不燃性、重量輕，價格比琺瑯電阻便宜。
5. 不似琺瑯電阻高溫燒成，此種電阻持久而不損壞。

### Features

1. High power, Small body size.
2. Super heat dissipation ; small linear temperature coefficient.
3. Instant overload capability ; low noise figure and low annual shift on resistance values.
4. Flameproof, light weight, price is lower than enamel types.
5. Winding wires are much more durable than enamel types which are produced in high temperature.

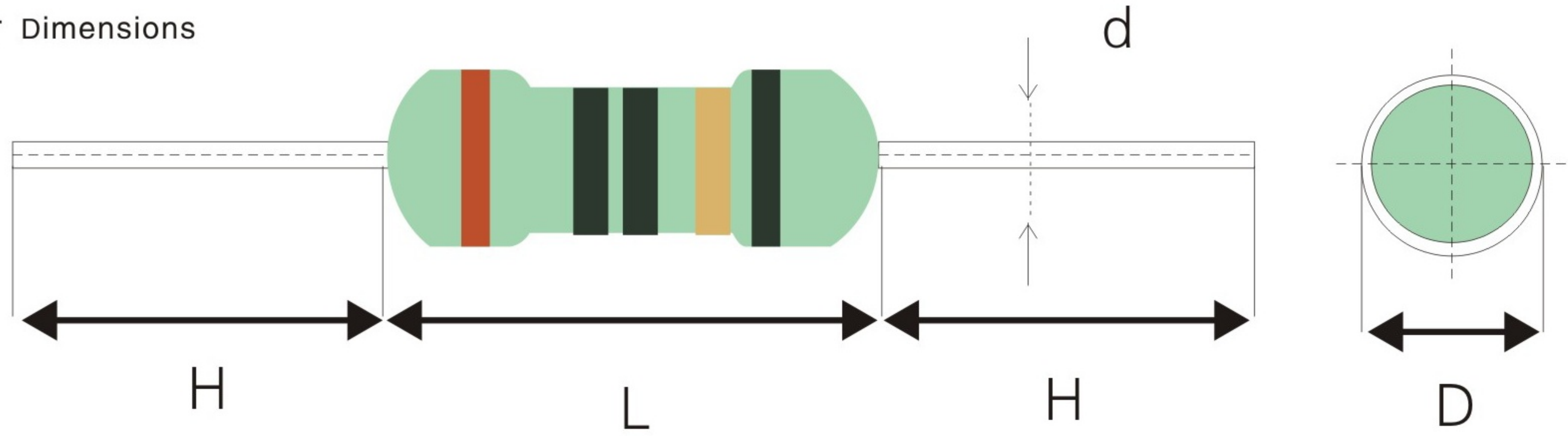
### 電氣及機械特性 ELECTRICAL AND MECHANICAL PERFORMANCE

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)	-
溫度係數 Resistance Temp. Coeff.	± 300 ppm/°C,	-55°C ~ 200°C
額定負載 Power Rating Load	Surface temp. 275°C Max. 最高表面溫度 275°C, $\Delta R/R \leq \pm 2\%$	Rated voltage for 30 minutes 額定電壓/30分鐘
短時間過負載 Short Time Overload	± 2%	5 times of rated wattage for 5 seconds. 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	Applying suitable Voltage listed on Dimensions for one minute. 施加規定電壓1分鐘
絕緣電阻 Insulation Resistance	1,000M $\Omega$	DC 100V or 500V megger
端子強度 Terminal Strength	No evidence of mechanical damage 無機械性能損壞現象	1WS & 2WS : 1kg 3WS : 2.5kg
焊錫性 Solder-ability	Minimum 95% coverage 焊錫面積 $\geq 95\%$	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, $\Delta R/R \leq \pm 1\%$	270 ± 5°C for 10 ± 1 seconds 350 ± 10°C for 3.5 ± 0.5 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	$\Delta R/R \leq \pm 1\%$	-55°C (30 min.) → Room Temp. (3 min.) → +200°C (30 min.) → Room Temp. (3 min.) / (5 cycles)
負載壽命 Load Life	$\Delta R/R \leq \pm 3\%$	Rated power load 90 minutes ON 30 minutes OFF 70°C 1000 hours
耐濕壽命 Moisture-proof Load Life	$\Delta R/R \leq \pm 3\%$	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

尺寸 Dimensions



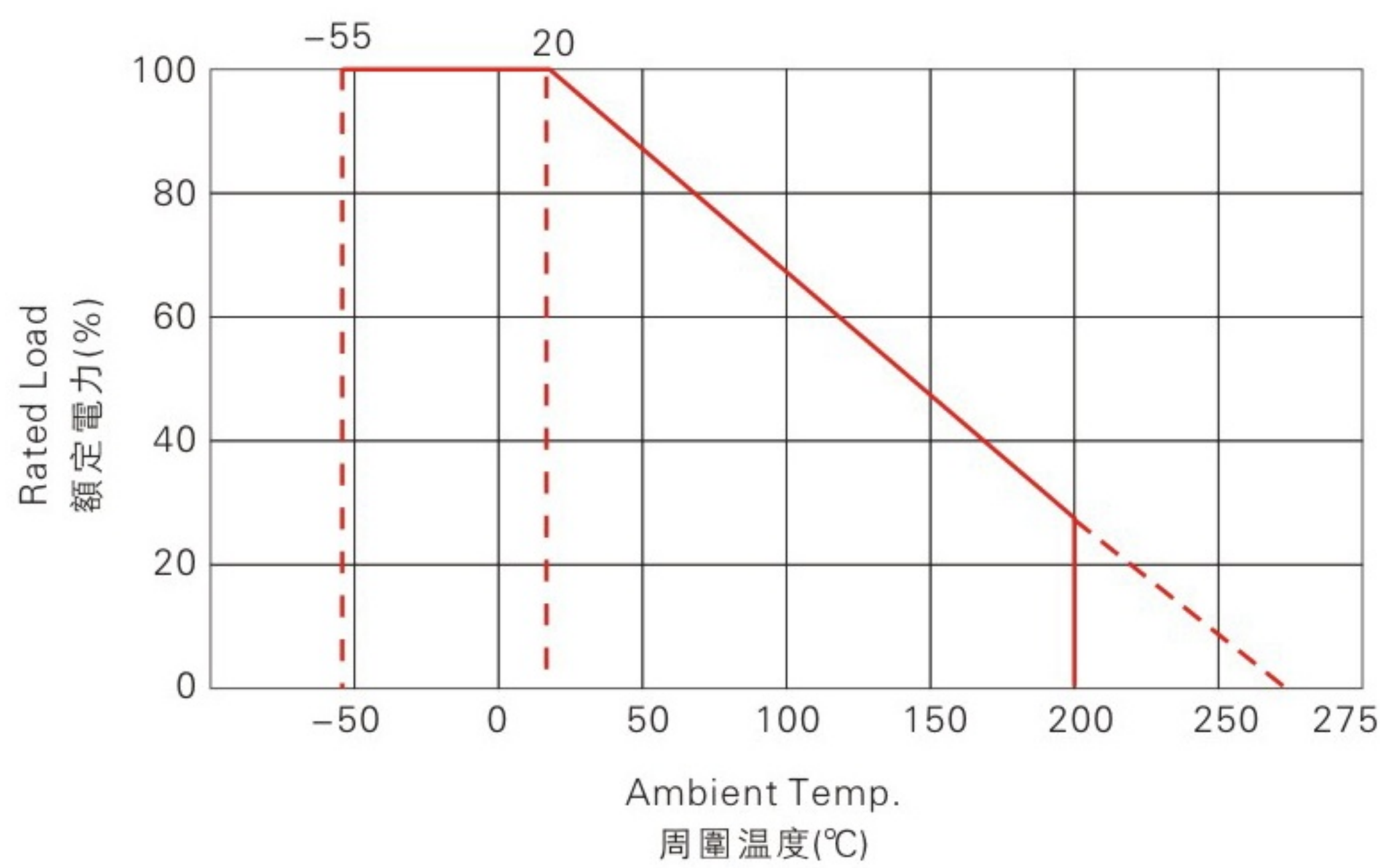
Unit: mm

Rated Wattage	$D \pm 1$	$L \pm 1$	$H \pm 3$	$d \pm 0.1$	Resistance Range( $\Omega$ )	Dielectric Withstanding Voltage
1WS	$2.6 \pm 0.5$	6.8	28	0.65	0.1~200	250V
2WS	3.0	9	28	0.65	0.1~300	350V
3WS	5.0	11	28	0.80	0.1~800	500V

Note: Too low or too high ohmic values can be supplied only case by case.

電力輕減曲綫 Derating Curve

For resistors operated in ambient temperatures above 20°C, power rating must be derated in accordance with the curve below.



表面温度上升曲綫 Surface Temperature Rise

