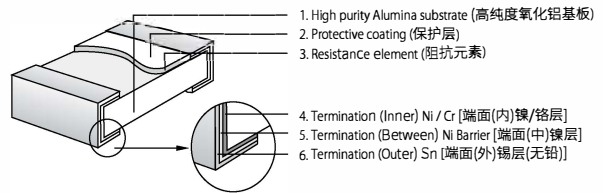
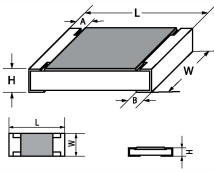


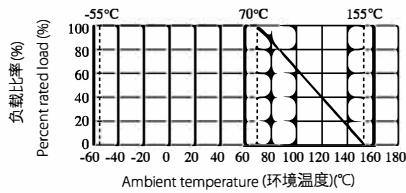
## Feature (特性)

- High power rating up to 6 watts  
高功率可达6W
- Suitable for both wave & re-flow soldering  
适合波峰焊与回流焊
- Application LED lamps, Intelligent home appliances, Medical equipment, Kinds of industrial control devices & Industrial supplies  
适用于LED灯具、智能家电产品、医疗设备、各种工业控制装置及工业电源等
- AEC-Q200 qualified  
符合AEC-Q200相关条款

## Figures (型状)



## Derating Curve & Specification (降功率曲线及性能)



Type 类型	L(mm)	W(mm)	H(mm)	A(mm)	B(mm)
SP10 (2010)	5.00 ± 0.10	2.50 ± 0.15	1.10 ± 0.10	0.60 ± 0.25	0.50 ± 0.20
SP12 (2512)	6.35 ± 0.10	3.20 ± 0.15	1.10 ± 0.10	0.60 ± 0.25	1.80 ± 0.20
SP17 (2817)	7.10 ± 0.20	4.20 ± 0.20	1.10 ± 0.10	0.60 ± 0.20	1.80 ± 0.20
SP20 (4320)	11.00 ± 0.30	5.00 ± 0.25	1.10 ± 0.10	0.80 ± 0.20	2.40 ± 0.20
SP27 (4527)	11.60 ± 0.30	6.85 ± 0.25	1.10 ± 0.10	1.00 ± 0.20	2.50 ± 0.20

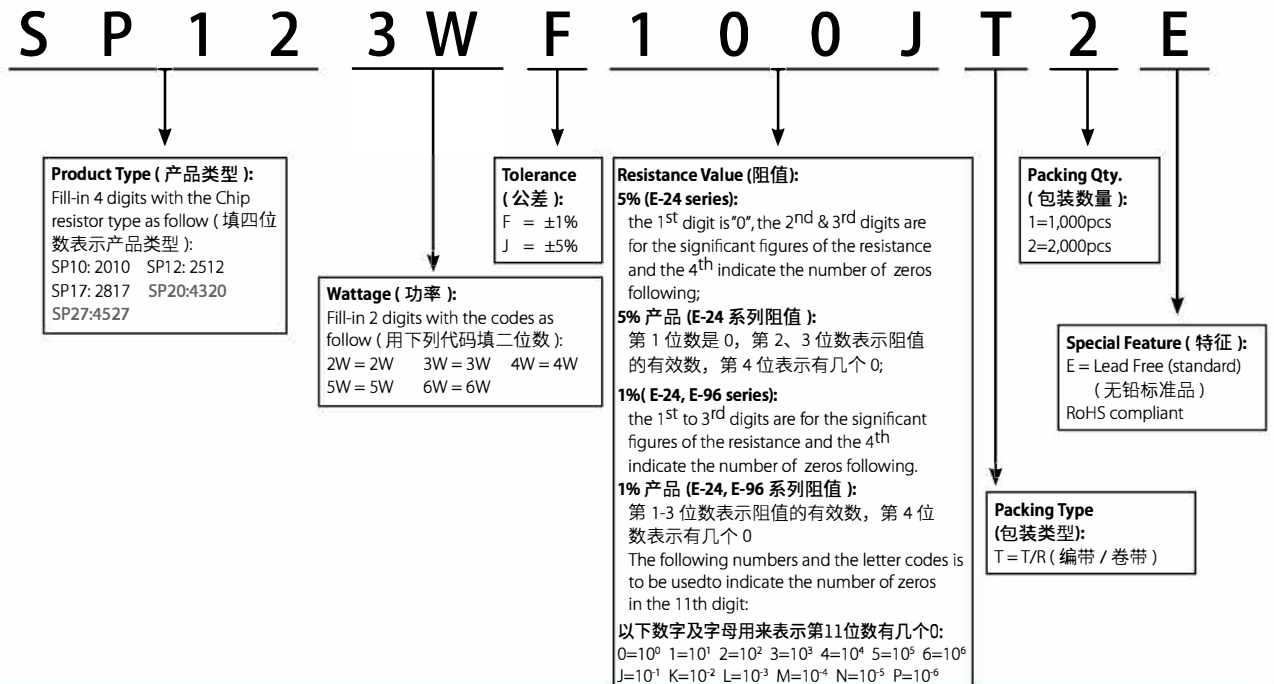
Type 类型	Size 尺寸	Power Rating 额定功率	Resistance Range of 1% & 5% 1% & 5% 的阻值范围	Max. Working Voltage 最大工作电压	Max. Overload Voltage 最大过负荷电压	Dielectric Withstanding Voltage 绝缘耐压	Operating Temperature 工作温度范围
SP10	2010 (5025)	2W	1Ω ~ 10MΩ	200V	500V	500V	-55°C~155°C
SP12	2512 (6432)	3W		250V	500V	500V	
SP17	2817 (7142)	4W		250V	500V	500V	
SP20	4320 (1150)	5W		300V	600V	600V	
SP27	4527 (1267)	6W		300V	600V	600V	

## Performance Specifications (性能)

Test Item 试验项目	Test Methods 试验方法	Evaluation Criteria 判定标准
<b>Temperature coefficient 温度系数</b>	Measure between -55°C ~+155°C 测定范围：-55°C ~+155°C	1Ω~10Ω ≤± 200PPM/°C 10.1Ω~10MΩ ≤± 100PPM/°C
<b>Short-time overload 短时间过负荷</b>	2.5x Rated voltage or Max. Overload Voltage whichever is lower for 5 seconds, then check the resistance. 2.5 倍额定电压或最大过负荷电压 (取其低者), 持续 5 秒钟, 然后测阻值。	± 5% (2.0% + 0.1Ω) ± 1% (1.0% + 0.1Ω)
<b>Terminal Bending 端子弯曲</b>	Bending Distance 3mm, Duration: 60s±5s, then check the resistance. 弯曲距离：3mm, 保持时间：60s±5s, 然后测试阻值。	± (1.0% + 0.05Ω)
<b>Solderability 可焊性</b>	Temperature of solder: 245±3°C; Dwell time in solder: 2~3seconds. 锡炉温度：245±3°C；浸入时间：2~3 秒。	Coverage must be over 95%. 覆盖率 ≥95%
<b>Soldering heat 耐焊接热</b>	Dip the resistor into a temperature of 260 ±5°C and hold it for a 10±1 seconds. 将电阻浸入到260±5°C的锡炉中并保持10秒时间。	± (1.0%+0.05Ω)
<b>Dielectric withstanding voltage 绝缘耐压</b>	Resistor shall be clamped in the trough of 90° metallic V-block and shall be tested at AC potential respectively specified in the given list of each product type for 60~70s. 电阻固定在 90° 的 V 型槽中, 根据不同产品规定交流电压, 持续 60~70 秒。	No evidence of flashover, mechanical damage, arcing or insulation breakdown 无击穿, 电弧及可见机械性损伤
<b>Rapid change of temperature 温度快速变化</b>	30 min at -55 °C and 30 min at 155 °C; 100 cycles -55 °C 温度放置 30min, 155 °C 温度放置 30min, 100 个循环；	± 5% (1.0% + 0.1Ω). ± 1% (0.5% + 0.1Ω).
<b>Load life 负载寿命</b>	70°C, at RCWV or Max.Working Voltage whichever less, 1,000 hours(1.5 hours "ON", 0.5 hours "OFF"), Measurement at 24±4 hours after test conclusion. 70°C, 额定工作电压或最大工作电压 (取其低者), 持续时间：1,000h(1.5h "通", 0.5h "断"), 试验结束 24h 后进行测试。 MIL-STD-202 Method 108	± 5% (3.0% + 0.1Ω). ± 1% (1.0% + 0.1Ω).
<b>Humidity (Steady State) 恒定湿热</b>	Temporary resistance change after 240 hours exposure in a humidity test chamber controlled at 40±2°C and 90~95% RH. 在 40±2°C 和 90~95% RH 相对湿度条件下, 存放 240h 后阻值变化率	± 5% (3.0% + 0.1Ω) . ± 1% (0.5% + 0.1Ω)
<b>Load life in humidity 湿度寿命</b>	Resistance change after 1000 hours (1.5hours "ON", 0.5hours "OFF") at RCWV or Max.Working Voltage whichever less in a humidity test chamber controlled at 40±2°C and 90~95% RH. 持续时间：1000h (1.5h "通", 0.5h "断"); 试验温度：40±2°C；相对湿度：90~95% RH；试验电压：额定工作电压或最大工作电压 (取其低者)。	± 5% (3.0% + 0.1Ω) . ± 1% (1.0% + 0.1Ω)

## Ordering Procedure (Example: SP12 3W (2512) ±1% 10Ω T/R-2,000)

订购方式 (例如: SP12 3W (2512) ±1% 10Ω T/R-2,000)



Remark: For more details, please check page 171, Part No. System. 注：更多细节详见P171标准料号系统。