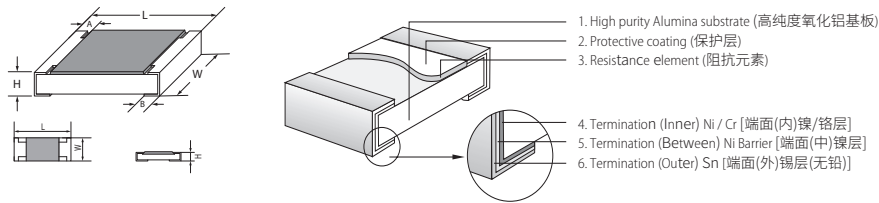


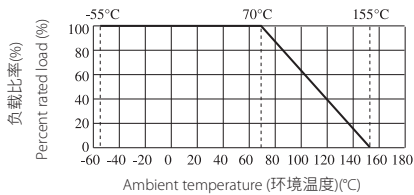
Feature (特性)

- 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

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

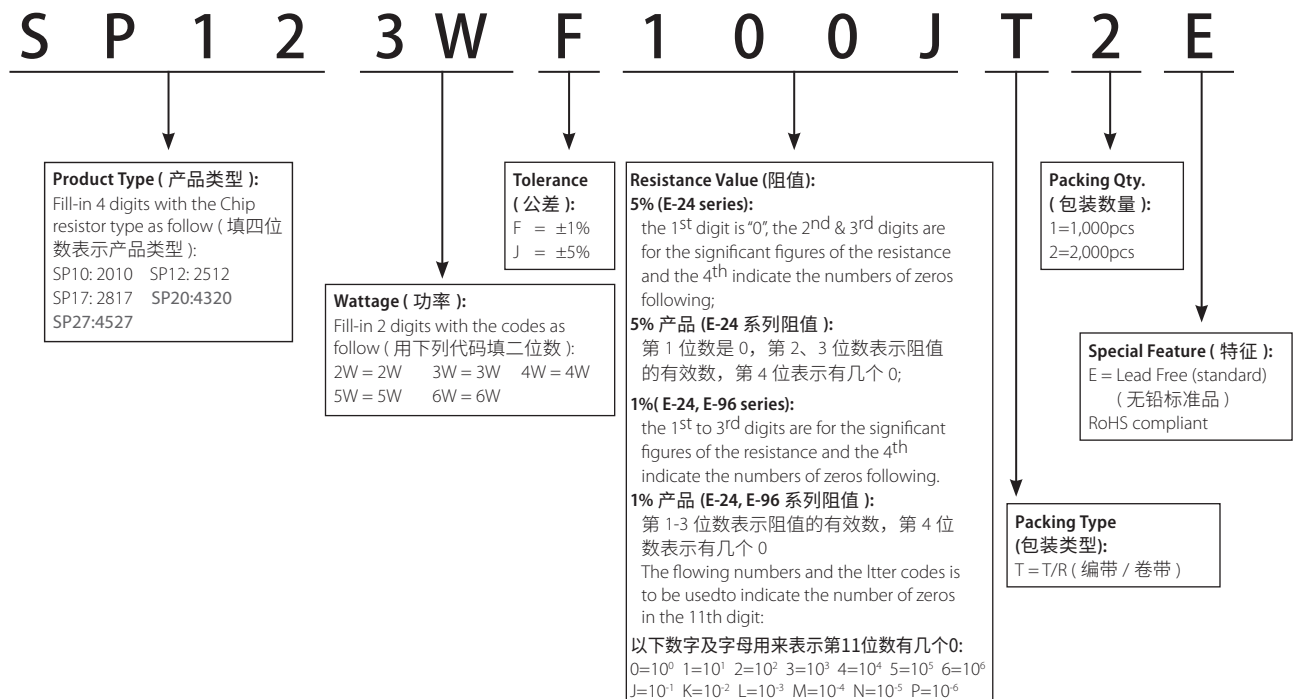
Type 类型	Size 尺寸	Power Rating at 70°C 功率	Resistance Range of 1% & 5% 1% & 5% 的阻值范围	Max. Working Voltage 最大工作电压	Max. Overload Voltage 最大过负荷电压	Dielectric Withstanding Voltage 绝缘耐压	Operating Temperature 工作温度范围
SP10	2010 (5025)	2W	1Ω ~ 10MΩ	200V	500V	500V	-55°C~155°C
SP12	2512 (6432)	3W		250V	500V	500V	
SP17	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
Temperature coefficient 温度系数	Measure between -55°C ~+155°C 测定范围：-55°C ~+155°C	1Ω~10Ω ≤± 200PPM/°C 10.1Ω~10MΩ ≤± 100PPM/°C
Short-time overload 短时间过负荷	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)
Terminal Bending 端子弯曲	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)
Solderability 可焊性	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%
Soldering heat 耐焊接热	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)
Dielectric withstanding voltage 绝缘耐压	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, 飞弧及可见机械性损伤
Rapid change of temperature 温度快速变化	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).
Load life 负载寿命	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).
Humidity (Steady State) 恒定湿热	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)
Load life in humidity 湿度寿命	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/technical support please send email to your contact sales.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Royalohm:](#)

<u>SP102WF1020T2E</u>	<u>SP102WF1050T2E</u>	<u>SP102WF1104T2E</u>	<u>SP102WF1201T2E</u>	<u>SP102WF124JT2E</u>
<u>SP102WF127JT2E</u>	<u>SP102WF1372T2E</u>	<u>SP102WF147KT2E</u>	<u>SP102WF154KT2E</u>	<u>SP102WF1603T2E</u>
<u>SP102WF1653T2E</u>	<u>SP102WF1690T2E</u>	<u>SP102WF1800T2E</u>	<u>SP102WF1804T2E</u>	<u>SP102WF1874T2E</u>
<u>SP102WF1914T2E</u>	<u>SP102WF1961T2E</u>	<u>SP102WF2051T2E</u>	<u>SP102WF220JT2E</u>	<u>SP102WF2322T2E</u>
<u>SP102WF2372T2E</u>	<u>SP102WF243KT2E</u>	<u>SP102WF2673T2E</u>	<u>SP102WF2800T2E</u>	<u>SP102WF2870T2E</u>
<u>SP102WF3001T2E</u>	<u>SP102WF3163T2E</u>	<u>SP102WF3303T2E</u>	<u>SP102WF3400T2E</u>	<u>SP102WF3570T2E</u>
<u>SP102WF3744T2E</u>	<u>SP102WF3921T2E</u>	<u>SP102WF4021T2E</u>	<u>SP102WF422JT2E</u>	<u>SP102WF4532T2E</u>
<u>SP102WF470KT2E</u>	<u>SP102WF475KT2E</u>	<u>SP102WF5102T2E</u>	<u>SP102WF536KT2E</u>	<u>SP102WF560KT2E</u>
<u>SP102WF5763T2E</u>	<u>SP102WF6042T2E</u>	<u>SP102WF634KT2E</u>	<u>SP102WF6493T2E</u>	<u>SP102WF6803T2E</u>
<u>SP102WF6813T2E</u>	<u>SP102WF6980T2E</u>	<u>SP102WF7320T2E</u>	<u>SP102WF7874T2E</u>	<u>SP102WF8251T2E</u>
<u>SP102WF8452T2E</u>	<u>SP102WF9001T2E</u>	<u>SP102WF9530T2E</u>	<u>SP102WJ0103T2E</u>	<u>SP102WJ0112T2E</u>
<u>SP102WJ013JT2E</u>	<u>SP102WJ0203T2E</u>	<u>SP102WJ0242T2E</u>	<u>SP102WJ027JT2E</u>	<u>SP102WJ033JT2E</u>
<u>SP102WJ0473T2E</u>	<u>SP102WJ0620T2E</u>	<u>SP102WJ0680T2E</u>	<u>SP102WJ0824T2E</u>	<u>SP123WF110KT2E</u>
<u>SP123WF1502T2E</u>	<u>SP123WF1602T2E</u>	<u>SP123WF200KT2E</u>	<u>SP123WF3003T2E</u>	<u>SP123WF3603T2E</u>
<u>SP123WF4020T2E</u>	<u>SP123WF470KT2E</u>	<u>SP123WF6803T2E</u>	<u>SP123WF9100T2E</u>	<u>SP123WJ0000T2E</u>
<u>SP123WJ0103T2E</u>	<u>SP123WJ0122T2E</u>	<u>SP123WJ016JT2E</u>	<u>SP123WJ0223T2E</u>	<u>SP123WJ0243T2E</u>
<u>SP123WJ0330T2E</u>	<u>SP123WJ0434T2E</u>	<u>SP123WJ0561T2E</u>	<u>SP123WJ0621T2E</u>	<u>SP123WJ0755T2E</u>
<u>SP174WF1021T2E</u>	<u>SP174WF1071T2E</u>	<u>SP174WF110JT2E</u>	<u>SP174WF115JT2E</u>	<u>SP174WF1242T2E</u>
<u>SP174WF130KT2E</u>	<u>SP174WF133KT2E</u>	<u>SP174WF1433T2E</u>	<u>SP174WF1580T2E</u>	<u>SP174WF1624T2E</u>
<u>SP174WF1654T2E</u>	<u>SP174WF1781T2E</u>	<u>SP174WF187JT2E</u>	<u>SP174WF196JT2E</u>	<u>SP174WF2052T2E</u>