

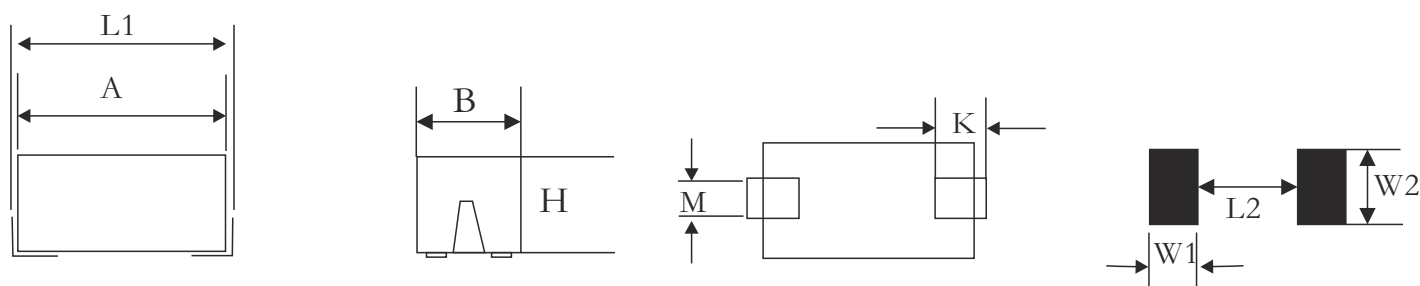
## 应用 Applications

- 电源、电路  
switching power supply
- 数控机床  
Nc machine tool
- 精密仪器仪表  
Precision instruments
- 防雷保护电路  
Lightning protection appliances

## 特性 Feature

- 完全模压结构  
Mold structure
- 防爆、抗浪涌、高效安全  
Excellent resistance to lightning,surge characteristics
- 防潮性好，适应恶劣环境  
Good moisture-proof ability to adapt to harsh environment.
- 过温度保护  
Over temperature protection
- 表面贴装  
The resistor is available for automatic SMD assembly system
- 提供无感应设计的产品  
According to the customer request to provide Non inductance design
- 熔断后残留阻值 $\geq$ 公称阻值的5万倍  
Residual resistance 5M ohm

## 尺寸 Dimensions



规格 Type	功率 (W)	尺寸(mm)								
		LI $\pm$ 0.5	A(max)	B(max)	H $\pm$ 0.25	K(min)	M $\pm$ 0.4	W1	W2	L2
SMM	1/2W 1WS	7.5	6.5	4.0	3.2	1.2	1.0	2.0	2.0	4.0
SMM	1W 2WS	7.9	7.0	4.2	3.5	1.8	1.2	3.0	2.2	5.2
SMM	2W 3WS	12.0	10.5	5.5	5.0	2.2	1.8	3.2	2.5	7.0
SMM	3W 5WS	17.0	14.5	7.3	6.8	2.5	1.8	4.5	3.0	8.8

## ● 功率、阻值范围与耐电压 Power And Resistance etc

规格 Type	额定功率 Rated Power(W)	阻值范围 Resistance Range( $\Omega$ )	精度范围 Tolerance Range	温度系数 ppm/ $^{\circ}$ C	绝缘 电压 V	最高使用 电压V	最高过 负荷电压	抗浪涌 抗雷击 电压
SMM	1/2W 1WS	0.22~1K $\Omega$	F= $\pm$ 1% G= $\pm$ 2%	$\pm$ 25ppm/ $^{\circ}$ C $\pm$ 50ppm/ $^{\circ}$ C	500V	50V	$\sqrt{5}$ PR	1KV~5KV
	1W 2WS	0.10~2K $\Omega$				100V		1KV~5KV
	2W 3WS	0.10~3K $\Omega$	J= $\pm$ 5%	200V		1KV~6KV		
	3W 5WS	0.22~10K $\Omega$	$\pm$ 100ppm/ $^{\circ}$ C	400V		1KV~7KV		

## ● 产品性能 Property

试验项目	性能要求	试验方法(JIS C 5201-1)
短期过负荷 Short time overload	$\Delta R \leq \pm (0.5\%R + 0.05\Omega)$	5PR, 5秒 Rated power $\times$ 5, 5sec
温度快速变化 Rapid change of temperature	$\Delta R \leq \pm (0.5\%R + 0.05\Omega)$	-55 $^{\circ}$ C / 155 $^{\circ}$ C 30分钟, 循环5次 -55 / 155 30min, 5cycles
耐焊接热 Solder thermal shock	$\Delta R \leq \pm (0.5\%R + 0.05\Omega)$	260 $\pm$ 3 $^{\circ}$ C, 10 $\pm$ 0.5秒 260 $\pm$ 3, 10 $\pm$ 0.5 $^{\circ}$ C sec
耐久性 Endurance	$\Delta R \leq \pm (2\%R + 0.1\Omega)$	70 $^{\circ}$ C PR, 1000小时 70 $^{\circ}$ C PR, 1000hour
防爆测试 Explosion proof test	无起火, 无剧烈炸裂 No burst No visible flame	120V AC 或者 240V AC 短接 Rated voltage 120V AC or 240V AC
抗冲击测试 Anti-surge test	Combined waveform 1.2/50 s (8/20 s) $\pm$ 5times, interval time 20s. For unit more than $\pm$ 2.0Kv	可参照 IEC-61000-4-5 Refer to IEC-61000-4-5
过温度保护 Over temperature protection	超过规定温度熔断, 保护电路. Exceed the specified temperature to fuse and protect the circuit	电阻在电路板上, 工作时, 温度 275 $\geq$ $^{\circ}$ C When the resistance is working on the circuit board Working temperature $\geq$ 275 $^{\circ}$ C
熔断特性 Fusing characteristics	熔断时间 30S Fusing time 30S	25倍功率 25Times rated power
	熔断时间 15S Fusing time 150S	36倍功率 36Times rated power

## ● 产品包装 Product Packing

### ■ 标准包装 Standard Packing

- 散件包装: 每包最少500只  
Bulk Packing: Min. 500 pcs. bag
- SMT编带及包装: 规格与数量如下表  
Embossed taping & Packing:

产品型号	每盘编带数量
SMM 1/2W 1WS	2000
SMM 1W 2WS	2000
SMM 2W 3WS	1000
SMM 3W 5WS	800

## 3、实物包装图

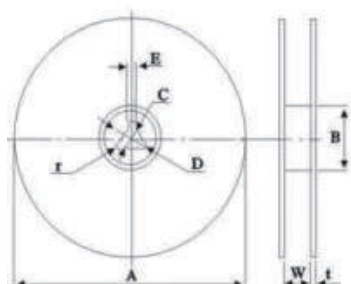
Actual packing diagram:



### ■ 编带 Taping

卷式编带盘图形及尺寸 Skech & Dimensions of Reel (Fig. I)

图 I 卷式编带盘图形及尺寸(mm) Fig. I Skech & Dimensions of reel (mm)



Dim (mm)	cods	A ± 5.0	B	C ± 0.5	D ± 1.0	E ± 0.5	W ± 1.5	t ± 0.5	r
SMM	330	φ 100	13.0	23.0	2.0	17.0	2.0	R1.0	
SMM	330	φ 100	13.0	23.0	2.0	25.0	2.0	R1.0	
SMM	330	φ 100	13.0	23.0	2.0	25.0	2.0	R1.0	
SMM	330	φ 100	13.0	23.0	2.0	25.0	2.0	R1.0	

### ■ 建议焊接方式

回流焊,烙铁焊。 Reflow soldering, iron soldering

## ● 料号编号 Ordering Information

例 example

SMM	005	10R00	J	T
产品名称 Name	功率 Power	阻值 ohm	精度 Tol	包装方式 Packaging
SMM	005=0.5W 100S=1WS 100=1W 200S=2WS 200=2W 300S=3WS 300=3W	10R00=10Ω	F= ± 1% G= ± 2% J= ± 5%	T:编带Tape B:散装Bag