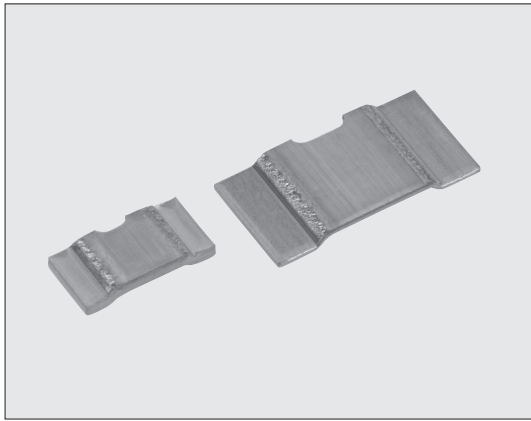


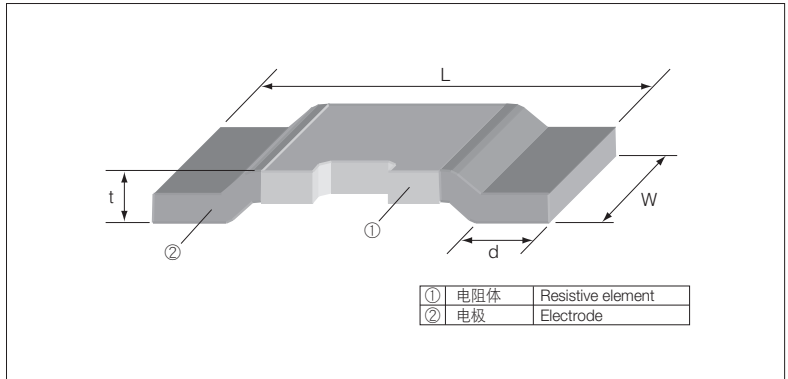
# CURRENT SENSING (FOR HIGH POWER)



## PSJ2·PSL2 片式功率分流电阻器 Chip Type Power Shunt



### ■ 结构图 Construction



### ■ 特点 Features

- 超低电阻值，适用于检测大电流。
- 可以自动贴装。
- 对应回流焊。（不对应波峰焊）
- 符合欧盟RoHS。
- AEC-Q200相关数据已取得。
- Ultra low resistance, suitable for large current sensing.
- Automatic mounting machines are applicable.
- Suitable for reflow soldering. (Not suitable for flow soldering.)
- Products meet EU-RoHS requirements.
- AEC-Q200 qualified.

### ■ 用途 Applications

- 用于检测车载模块、变频器电源的电流。
- Current sensing for module of Automobiles, Inverter power supplies etc.

### ■ 参考标准 Reference Standards

IEC 60115-1  
JIS C 5201-1

### ■ 外形尺寸 Dimensions

型号 Type (Inch Size Code)	电阻值 (Ω) Resistance	尺寸 Dimensions (mm)				Weight (g) (1000pcs)
		L	W	d	t	
PSJ2 (3920)	0.2m	10.0±0.25	5.2±0.25	2.0±0.25	1.98±0.2	655
	0.5m				1.27±0.2	346
	1m				0.89±0.2	176
	2m				1.17±0.2	296
	3m				0.95±0.2	199
PSL2 (2512)	0.2m	6.3±0.15	3.15±0.15	1.15±0.15	1.40±0.15	181
	0.3m				1.32±0.15	161
	0.5m				1.12±0.15	128
	0.5m				1.12±0.15	128

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开发中 = Under development

### ■ 品名构成 Type Designation

实例 Example

PS	J	2	N	TEB	L500	F
品种 Product Code	形状与额定功率 Style & Power Rating	端子数 Terminal Number	端子表面材质 Terminal Surface Material	二次加工 Taping	公称电阻值 Nominal Resistance	阻值允许偏差 Resistance Tolerance
	J(0.2m) : 12W J(0.5m) : 10W J(1m) : 8W J(2m) : 6W J(3m) : 5W J(4m) : 5W L(0.2m) : 9W L(0.3m) : 8W L(0.5m) : 8W		N: 无表面处理 N: No surface treatment	TEB: 8mm pitch plastic embossed BK: Bulk	4 digits L200: 0.2mΩ L300: 0.3mΩ L500: 0.5mΩ 1L00: 1mΩ 2L00: 2mΩ 3L00: 3mΩ 4L00: 4mΩ	F: ±1%

欲知关于此产品含有的环境负荷物质详情（除EU-RoHS以外），请与我们联系。编带细节请参考卷末附录C。

Contact us when you have control request for environmental hazardous material other than the substance specified by EU-RoHS.

For further information on taping, please refer to APPENDIX C on the back pages.

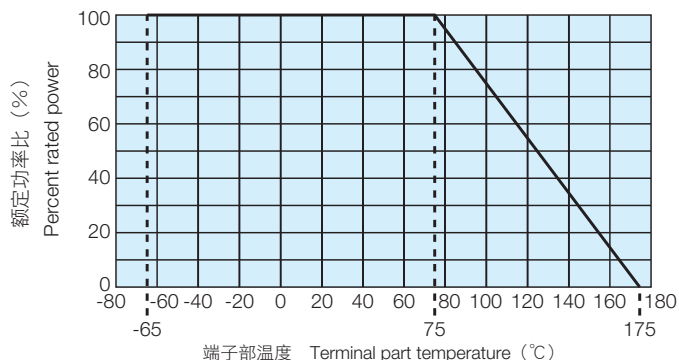
### ■ 额定值 Ratings

型号 Type	额定功率 Power Rating (额定电流 Current Rating)	电阻温度系数 T.C.R. (×10 <sup>-6</sup> /K)	电阻值范围 Resistance Range (Ω)	阻值允许偏差 Resistance Tolerance	额定端子部温度 Rated Terminal Part Temp.	使用温度范围 Operating Temp. Range	编带和包装数/卷 Taping & Q'ty/Reel (pcs)
							TEB
PSJ2	12W (244A)	±200	0.2m	F: ±1%	75°C	-65~+175°C	3,000
	10W (141A)		0.5m				
	8W (89A)		1m				
	6W (54A)		2m				
	5W (41A)		3m				
PSL2	9W (212A)	250±100	0.2m	F: ±1%	75°C	-65~+175°C	5,000
	8W (163A)		0.3m				
	8W (126A)		0.5m				

开发中 = Under development

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## ■ 负荷减轻特性曲线 Derating Curve



超过上述端子部温度使用时，请根据负荷特性曲线减小额定功率后使用。

※关于使用方法，请参照卷首的“端子部温度负荷减轻特性曲线的说明”。

For resistors operated terminal part temperature of described for each size or above, a power rating shall be derated in accordance with derating curve.

※Please refer to “Introduction of the derating curves based on the terminal part temperature” on the beginning of catalog before use.

## ■ 性能 Performance

试验项目 Test Items	标准值 Performance Requirements $\Delta R \pm \%$		试验方法 Test Methods
	保证值 Limit	代表值 Typical	
电阻温度系数 T.C.R	在规定的允许偏差内 Within specified T.C.R		+25°C/+125°C
过载(短时间) Overload (Short time)	0.5	0.1	PSJ (0.2mΩ) : 功率36W施加5秒钟 36W for 5s. PSJ (0.5mΩ) : 功率30W施加5秒钟 30W for 5s. PSJ (1mΩ) : 功率20W施加5秒钟 20W for 5s. PSJ (2mΩ) : 功率18W施加5秒钟 18W for 5s. PSJ (3mΩ) : 功率12.5W施加5秒钟 12.5W for 5s. PSJ (4mΩ) : 功率10W施加5秒钟 10W for 5s. PSL (0.2mΩ) : 功率27W施加5秒钟 27W for 5s. PSL (0.3mΩ、0.5mΩ) : 功率24W施加5秒钟 24W for 5s.
耐焊接热 Resistance to soldering heat	0.5	0.1	260°C±5°C、15s±1s
温度突变 Rapid change of temperature	0.5	0.1	-55°C (30min.) /+150°C (30min.) 1000 cycles
耐湿负荷 Moisture resistance	0.5	0.05	85°C±3°C、85%±3%RH、1000h、10% Bias
端子部温度在75°C以下时的耐久性 Endurance at 75°C and less of terminal part temperature	1.0	0.3	Terminal part temp.: 75°C±3°C、1000h、1.5h ON/0.5h OFF cycle
低温放置 Low temperature exposure	0.5	0.02	-65°C、1000h
高温放置 High temperature exposure	1.0	0.5	+175°C、1000h

## ■ 使用注意事项 Precautions for Use

- 作为分流电阻使用时，应考虑和周围线圈的电磁感应后进行图案布置。
- 对于PSJ2/PSL2的电阻值，焊接后的电阻值可能会根据焊盘图案的大小或焊锡量而变化。设计前请确认电阻值的增加/下降的影响。
- In case of using the low ohm resistors as shunt resistors, please lay out a pattern considering the electromagnetic induction with surrounding inductors.
- For resistance values of PSJ2/PSL2 the resistance the resistance value after soldering may change depending on the size of pad pattern or solder amount. Make sure the effect of decline/increase of resistance value before designing.