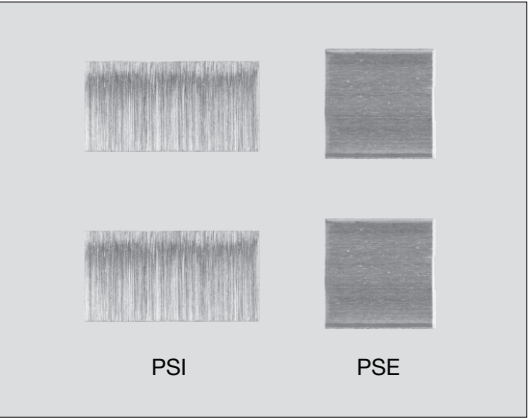


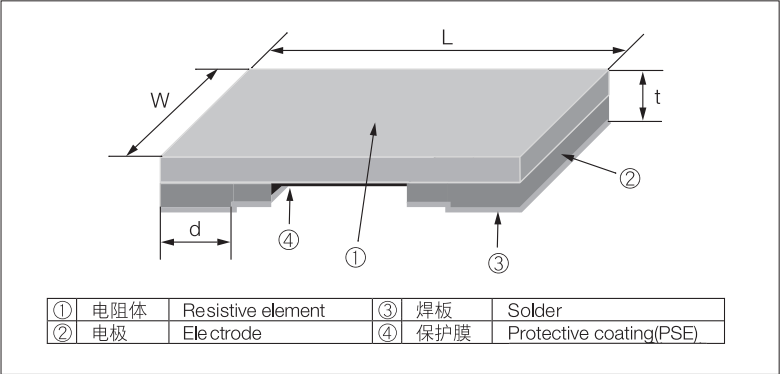
CURRENT SENSING (FOR HIGH POWER)



PSI • PSE 片式功率分流电阻器 Chip Type Power Shunt Resistors



■ 结构图 Construction



■ 特点 Features

- 电流平稳, 适合于大电流检测。
- 片状结构, 适用于冲孔安装。
- 无感应类型。
- 可用自动安装机。
- 适合回流焊接。(不宜波峰焊接。)
- 对应欧盟RoHS。
- Smooth current flow, suitable for large current detecting.
- Flat structure, applicable for strong mounting.
- Non inductive type.
- Automatic mounting machines are applicable.
- Suitable for reflow soldering.(Not suitable for flow soldering.)
- Products meet EU-RoHS requirements.

■ 用途 Applications

- 用于汽车、转换器电源等等组件的电流检出。
- 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±0.25	W±0.25	d±0.25	t±0.25	
PSI	1.0m	10.0	5.2	2.0	1.0	330
	2.0m				0.65	200
	3.0m				0.7	245
	4.0m					230
PSE	0.5m	6.4	6.4	2.2	0.65	215
	1.0m				0.50	200
	1.5m					160
	2.0m					130

■ 品名构成 Type Designation

实例 Example

PS	I	D	TEB	1L00	F
品种 Product Code	额定功率 Style & Power Rating	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
	I : 3W E : 3W	D: SnAgCu	TE•TEB: Plastic embossed BK: Bulk	F: 4 digits J: 3 digits	F: ±1% J: ±5%

电阻值范围 (Ω) Resistance Value	3位显示 3 digits	4位显示 4 digits
	3 digits	4 digits
0.5m	L50	—
1m	1L0	1L00
1.5m	1L5	—
2m	2L0	2L00
3m	—	3L00
4m	—	4L00

※1 预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	电阻温度系数 T.C.R. (×10 ⁻⁶ /K)	电阻值范围 Resistance Range (Ω)		额定载荷时端子部温度 Terminal Temp. Under a Rated Load	使用温度范围 Operating Temp. Range	编带和包装数/卷 Taping & Q'ty /Reel (pcs)	
			F: ±1%	J: ±5%			TE	TEB
PSI	3W ^{※2}	±75	1m ^{※3} , 2m ^{※3}	—	+105℃ and less	-65℃~+155℃	—	3,000
		±50	3m, 4m	—			—	3,000
PSE	3W ^{※2}	±150	—	0.5m, 1.0m 1.5m, 2.0m			2,000	—

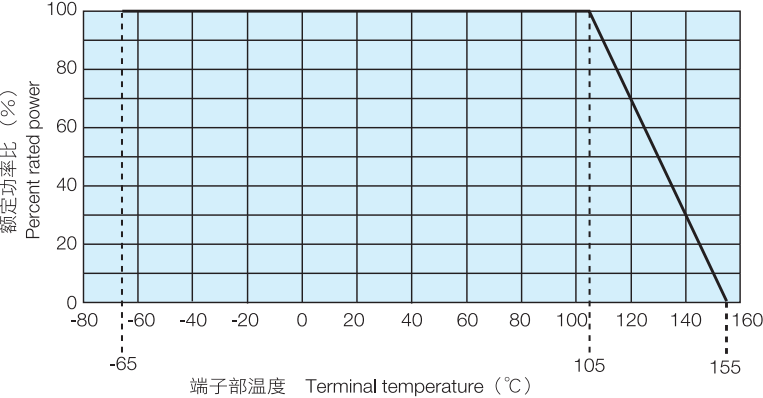
※2 由于额定功率是以本公司的评价标准(使用铝板)做出保证的, 所以请您在订货或使用前咨询。

※2 A power rating shall be guaranteed with a method shown in the item. (: Performance) Please inquire before you order and/or use.

※3 开发中。

※3 Under development.

■ 负荷特性曲线 Derating Curve



在环境温度105℃以上使用时，应按照上图负荷特性曲线，减小额定功率。
For resistors operated at terminal temperature of 105℃ or above, a power rating shall be derated in accordance with the above derating curve.

■ 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	
过载（短时间） Overload (Short time)	0.2: PSI 0.5: PSE	0.1: PSI 0.2: PSE	额定功率×5倍施加5秒钟 Rated Power×5 for 5s
耐焊接热 Resistance to soldering heat	0.5	0.1	260℃±5℃, 15s±1s
温度突变 Rapid change of temperature	0.5	0.2	-55℃ (30min.) / +125℃ (30min.) 1,000 cycles
耐湿负荷 Moisture resistance	0.5	0.2	85℃±2℃, 85%RH, 1,000h, 10%Bias
端子温度在105℃的耐久性 Endurance at 105℃ and less of terminal temperature	1	0.2: PSI 0.6: PSE	Terminal temp.: 105℃, 1,000h, 1.5h ON / 0.5h OFF cycle
低温放置 Low temperature exposure	0.5	0.02: PSI 0.1: PSE	-65℃, 96h
高温放置 High temperature exposure	1	0.4: PSI 0.6: PSE	+155℃, 1,000h

■ 使用注意事项 Precautions for Use

- 在用低欧姆值电阻作为分流电阻时，请设计某种式样，考虑周围电感器的电磁影响。
- PSI/PSB的电阻值，焊锡后的阻抗值会随焊接点式样的大小或焊锡数量而改变。设计以前确定电阻值的增加/下降结果。
- 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 PSI/PSE 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.