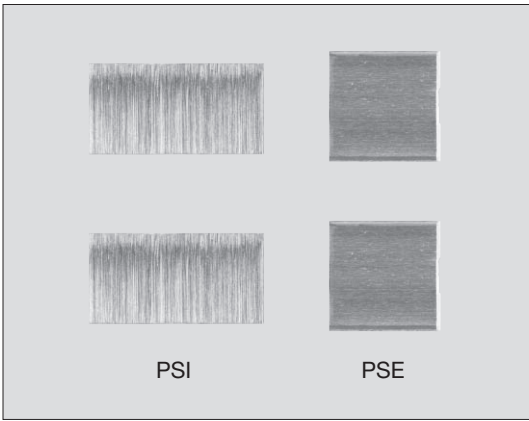
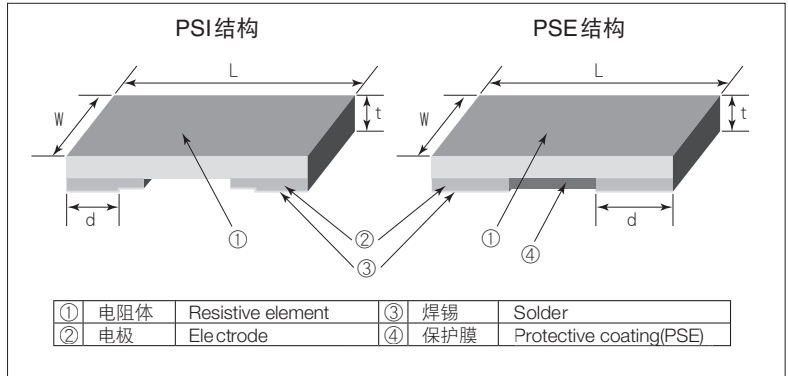


PSI • PSE 片式功率分流电阻器 Chip Type Power Shunt Resistors



■ 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。)
- 符合欧盟RoHS。
- AEC-Q200相关数据已取得。
- 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.
- AEC-Q200 qualified.

■ 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 (4020)	3.0m	10.0	5.2	2.0	0.7	245
	4.0m					230
PSE (2525)	0.5m	6.4	6.4	2.2	0.65	215
	1.0m					200
	1.5m				0.50	160
	2.0m					130

■ 用途 Applications

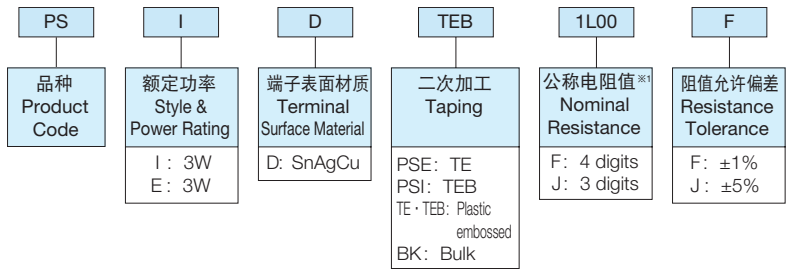
- 用于汽车、转换器电源等等组件的电流检出。
- Current sensing for module of Automobiles, Inverter power supplies etc.

■ 参考标准 Reference Standards

IEC 60115-1
JIS C 5201-1

■ 品名构成 Type Designation

实例 Example



电阻值范围 (Ω) Resistance Value	3位显示 3 digits	4位显示 4 digits
0.5m	L50	L500
1m	1L0	1L00
1.5m	1L5	1L50
2m	2L0	2L00
3m	-	3L00
4m	-	4L00

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.

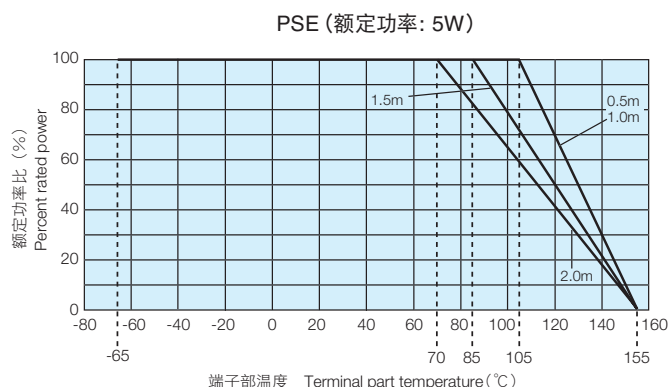
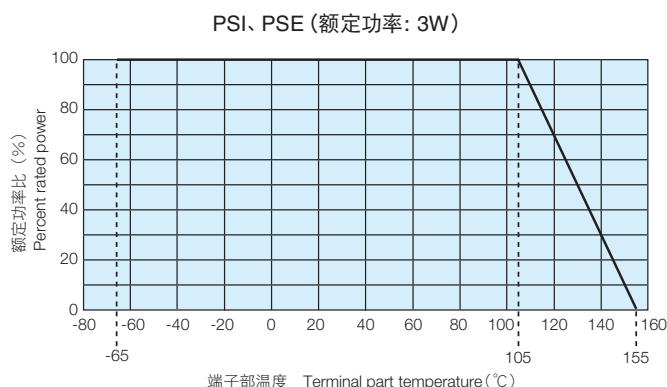
■ 额定值 Ratings

型号 Type	额定功率 Power Rating	电阻温度系数 T.C.R. (×10 ⁻⁶ /K)	电阻值范围 Resistance Range (Ω)		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)	
			F: ±1%	J: ±5%			TE	TEB
PSI	3W ^{※2}	±50	3m, 4m	-	105°C	-65°C ~ +155°C	-	3,000
PSE	3W ^{※2}	±150	0.5m, 1.0m 1.5m, 2.0m	0.5m, 1.0m 1.5m, 2.0m	105°C		2,000	-
	5W ^{※2}				0.5m, 1.0m: 105°C 1.5m: 85°C 2.0m: 70°C			

※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.

■ 负荷减轻特性曲线 Derating Curve



超过上述端子部温度使用时，请根据负荷减轻特性曲线减小额定功率后使用。

※ 有关使用方法，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 our 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	
过载 (短时间) Overload (Short time)	0.2: PSI 0.5: PSE	0.1: PSI 0.2: PSE	15W施加5秒钟 15W 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	0.2	-55°C (30min.) / +125°C (30min.) 1,000 cycles
耐湿负荷 Moisture resistance	0.5	0.2	85°C ± 2°C, 85%RH, 1,000h, 10%Bias
端子温度以下的耐久性 Endurance and less of terminal part temperature	1	0.2: PSI 0.6: PSE	Terminal part temp.: 105°C (PSI, PSE [3W], PSE [5W] 0.5m, 1.0m) : 85°C (PSE [5W] 1.5m) : 70°C (PSE [5W] 2.0m) 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°C, 96h
高温放置 High temperature exposure	1	0.4: PSI 0.6: PSE	+155°C, 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，请考虑周围线圈的电磁感应后配置模型。
- PSI/PSE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。设计前请确定电阻值的增加/下降后的影响。
- 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 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.