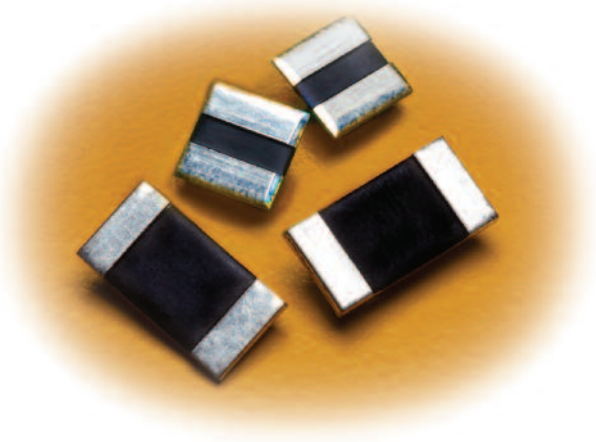
PSI, PSE

chip type power shunt resistor

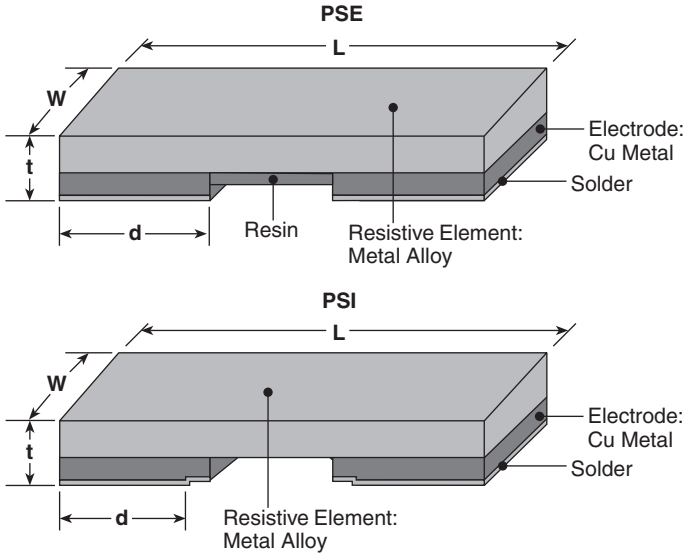
EU RoHS COMPLIANT



features

- Smooth current flow, suitable for large current detecting
- Flat structure, applicable for strong mounting
- Automatic mounting machines are applicable
- Products with lead-free terminations meet EU RoHS and China RoHS requirements
- AEC-Q200 Qualified

dimensions and construction



Type (Inch Size Code)	Resist. (Ω)	Dimensions inches (mm) L	W	d	t
PSI (3920)	3.0m	.394±.010 (10.0±0.25)	.205±.010 (5.2±0.25)	.079±.010 (2.0±0.25)	.028±.010 (0.7±0.25)
	4.0m				
PSE (2525)	0.5m, 1.0m	.252±.010 (6.4±0.25)	.252±.010 (6.4±0.25)	.087±.010 (2.2±0.25)	.026±.010 (0.65±0.25)
	1.5m, 2.0m				.019±.010 (0.50±0.25)

NOT RECOMMENDED FOR NEW DESIGN
RECOMMENDED REPLACEMENT PSJ2, *TLR3AP*

ordering information

PS	I	D	TEB	3L00	F
Type	Power Rating	Termination Material	Packaging	Nominal Resistance	Tolerance
	I: 3W E: 3W E: 5W	D: SnAgCu	TE: embossed plastic (PSE: 2,000 pieces/reel) TEB: embossed plastic (PSI: 3,000 pieces/reel)	±1%: 4 digits ±5%: 3 digits All values less than 0.1Ω (100mΩ) are expressed in mΩ with "L" as decimal Ex: 1mΩ = 1L00	F: ±1% J: ±5%

For further information on packaging, please refer to Appendix A.

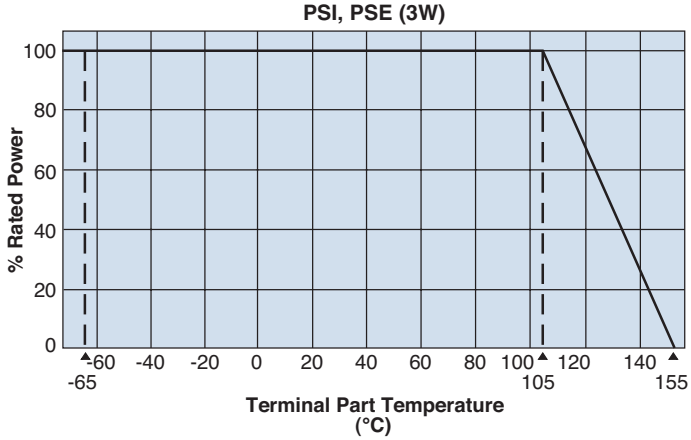
 9/30/19

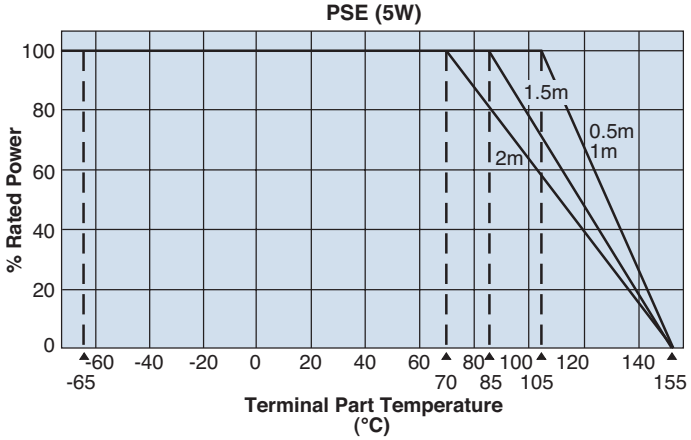
applications and ratings

Part Designation	Power Rating	T.C.R. (ppm/°C) Max.	Resistance Range		Rated Terminal Part Temperature	Operating Temperature Range
			F: ±1%	J: ±5%		
PSI	3W	±50	3mΩ, 4mΩ	—	+105°C	-65°C to +155°C
PSE	3W	±150	0.5mΩ, 1.0mΩ 1.5mΩ, 2.0mΩ	0.5mΩ, 1mΩ, 1.5mΩ, 2mΩ	+105°C	
	5W				0.5mΩ, 1mΩ: +105°C 1.5mΩ: 85°C 2mΩ: +70°C	

environmental applications

Derating Curve





For resistors operated at a terminal part temperature of described for each size or above, a power rating shall be derated in accordance with the derating curve.
Please refer to "Introduction of the derating curve based on the terminal part temperature" in the beginning of our catalog before use.

Performance Characteristics

Parameter	Requirement Δ R ±%		Test Method
	Limit	Typical	
T.C.R.	Within specified T.C.R.	—	+25°C/+100°C
Overload (Short time)	±0.2%: PSI ±0.5%: PSE	±0.1%: PSI ±0.2%: PSE	15W for 5 seconds
Resistance to Solder Heat	±0.5%	±0.1%	260°C ± 5°C, 15 seconds ± 1 second
Rapid Change of Temperature	±0.5%	±0.2%	-55°C (30 minutes), +125°C (30 minutes), 1,000 cycles
Moisture Resistance	±0.5%	±0.2%	85°C ± 2°C, 85% RH, 1000 hours, 10% Bias
Endurance at and Less of Terminal Part Temperature	±1.0%	±0.2%: PSI ±0.6%: PSE	Terminal part temperature: 105°C (PSI, PSE (3W), PSE (5W) 0.5m, 1.0m) +85°C (PSE (5W) 1.5m) +70°C (PSE (5W) 2.0m), 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle
Low Temperature Exposure	±0.5%	±0.02%: PSI ±0.1%: PSE	-65°C, 96 hours
High Temperature Exposure	±1%	±0.4%: PSI ±0.6%: PSE	+155°C, 1,000 hours