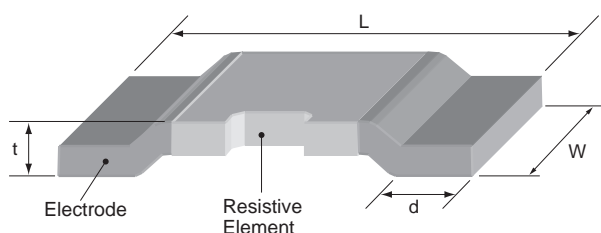


features

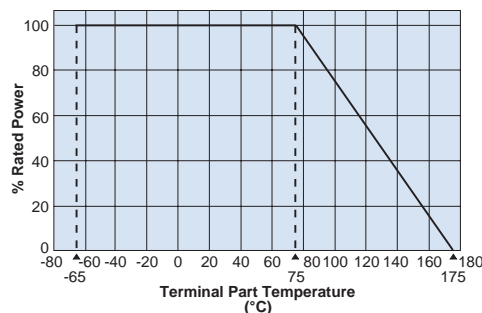
- Ultra low resistance, suitable for large current sensing
- Automatic mounting machines are applicable
- Suitable for reflow soldering (Not suitable for flow soldering)
- Products meet EU RoHS requirements
- AEC-Q200 Qualified

dimensions and construction



Type (Inch Size Code)	Resist. (Ω)	Dimensions inches (mm)			
		L	W	d	t
PSL2 (2512)	0.2m				.055 \pm .006 (1.40 \pm 0.15)
	0.3m	.248 \pm .006 (6.3 \pm 0.15)	.124 \pm .006 (3.15 \pm 0.15)	.045 \pm .006 (1.15 \pm 0.15)	.052 \pm .006 (1.32 \pm 0.15)
	0.5m				.048 \pm .006 (1.23 \pm 0.15)

Derating Curve



When the terminal part temperature of the resistor exceeds the rated part temperature, the power shall be derated according to the derating curve.

For more details, please visit www.koaspeer.com and go to "Resources," then "Technical Information," and select "[Derating Curves – Caution & Terms.](#)"

ordering information

PS	L	2	N	TEB	L500	F
Type	Power Rating	Termination Number	Termination Material	Packaging	Nominal Resistance	Tolerance
	L (0.2m): 9W L (0.3m): 8W L (0.5m): 8W		N: Pure Copper	TEB: 8mm pitch plastic embossed	4 digits: all values less than 100m Ω are expressed in m Ω with "L" as decimal Ex: 0.5m Ω - L500 1m Ω = 1L00	F: \pm 1%

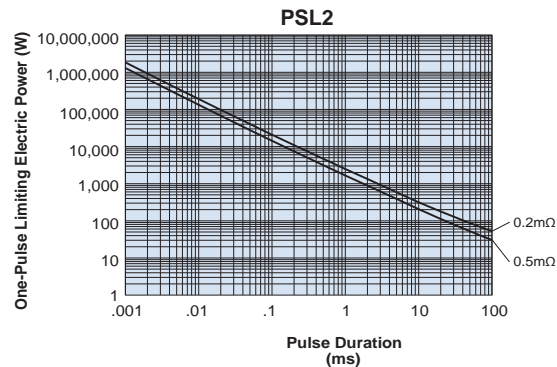
For further information on packaging, please refer to Appendix A.

applications and ratings

Part Designation	Power Rating (Current Rating)	T.C.R. (ppm/°C) Max.	Resistance Range	Resistance Tolerance	Rated Terminal Part Temperature	Operating Temperature Range
PSL2	9W (212A)	250±100	0.2mΩ	F: ±1%	75°C	-65°C to +175°C
	8W (163A)	±175	0.3mΩ			
	8W (126A)	±115	0.5mΩ			

environmental applications

One-Pulse Limiting Electric Power



Please ask us about the resistance characteristic of continuous applied pulse.

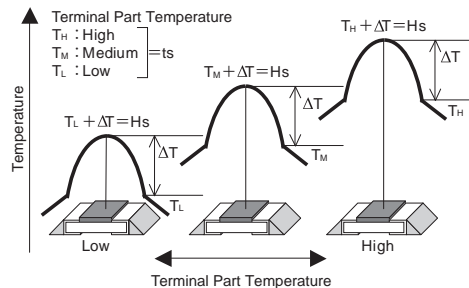
The pulse endurance values are not assured values, so be sure to check the products on actual equipment when you use them.

Thermal Resistance

Type	Resistance (Ω)	Rth (°C/W)
PSL2	0.2m	3.2
	0.5m	6.7

$$R_{th} = (H_s - t_s) / \text{Power}$$

Regarding the temperature rise, the value of the temperature varies per conditions and board for use since the temperature is measured under our measuring conditions. Please refer to us before use.



The temperature of the resistor will increase the same ΔT from the standard terminal part temperature regardless of the ambient temperature when the same power is applied. This is because there is hardly any heat dissipation from the resistor surface to the ambient air.

Performance Characteristics

Parameter	Requirement ΔR ±%		Test Method
	Limit	Typical	
Resistance	Within specified tolerance	—	25°C
T.C.R.	Within specified T.C.R.	—	+25°C/+125°C
Overload (Short time)	±0.5%	±0.1%	0.2m: 27W for 5 seconds; 0.3m, 0.5m: 24W 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%	±0.1%	-55°C (30 minutes), +150°C (30 minutes), 1,000 cycles
Moisture Resistance	±0.5%	±0.05%	85°C ± 3°C, 85% ± 3°C RH, 1000 hours, 10% Bias
Endurance at 75°C and Less of Terminal Part Temperature	±1.0%	±0.3%	Terminal part temperature: 75°C ± 3°C, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle
Low Temperature Exposure	±0.5%	±0.02%	-65°C, 1000 hours
High Temperature Exposure	±1%	±0.5%	+175°C, 1,000 hours