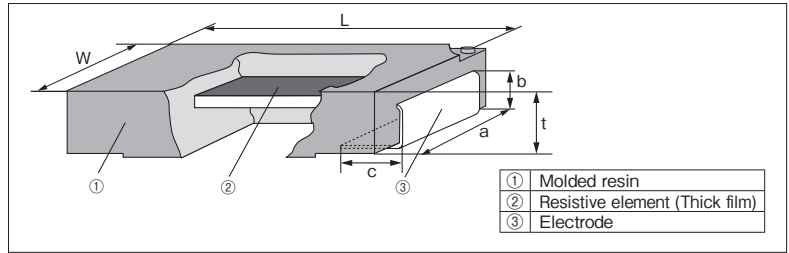


## SLR Mold Type Thick Film Resistors



Coating color : Black

### Construction



### Features

- Thick film resistor protected by liquid crystal polymer resin
- Excellent heat cycle characteristics
- Encapsulated with flame retardant resin molding. (UL94 V-0)
- High operating temperature range up to 180°C
- Products meet EU-RoHS requirements. EU-RoHS regulation is not intended for Pb-glass contained in electrode, resistor element and glass.
- AEC-Q200 Tested.

### Applications

Automotive ECU, etc.  
Industrial Batteries, etc.

### Reference Standards

IEC 60115-1  
JIS C 5201-1

### Dimensions

Type (Inch Size Code)	Dimensions (mm)						Weight (g) (1000pcs)
	L	W	t	a	b	c	
SLR1 (2512)	6.3±0.3	3.1±0.2	1.9±0.2	2.4±0.2	1.2±0.2	1.2±0.3	90

### Type Designation

Example

SLR	1	T	TE	R301	F
Product Code	Power Rating	Terminal Surface Material	Taping	Nominal Resistance	Resistance Tolerance
SLR	1:1.0W	T:Sn	TE:8mm pitch Plastic embossed TED:8mm pitch Plastic embossed BK: Bulk	D,F:4 digits J:3 digits	D:±0.5% F:±1% J:±5%

Resistance Value (Ω)	3 digits	Resistance Value (Ω)	4 digits
0.33~0.91	R33~R91	0.301~0.976	R301~R976
1~9.1	1R0~9R1	1~9.76	1R00~9R76

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.

### Ratings

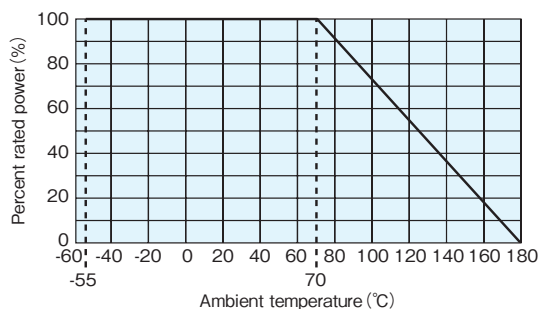
Type	Power Rating	Rated Ambient Temp.	Rated Terminal Part Temp.	Resistance Range (Ω)			T.C.R. (×10 <sup>-6</sup> /K)	Max. Working Voltage	Max. Overload Voltage	Operating Temp. Range	Taping & Q'ty/Reel (pcs)	
				D:±0.5% E24·E96	F:±1% E24·E96	J:±5% E24					TE	TED
SLR1	1W	70°C	90°C	301m~1M	301m~1M	330m~1M	±100	200V	400V	-55°C~+180°C	1,000	2,000

Rated voltage =  $\sqrt{\text{Power Rating} \times \text{Resistance value}}$  or Max. working voltage, whichever is lower.

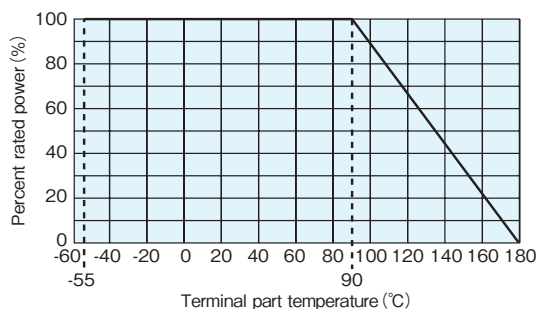
If any questions arise whether to use the "Rated Ambient Temperature" or the "Rated Terminal Part Temperature" in your usage conditions, please give priority to the "Rated Terminal Part Temperature".

For more details, please refer to "Introduction of the derating curves based on the terminal part temperature" on the beginning of our catalog.

## Derating Curve

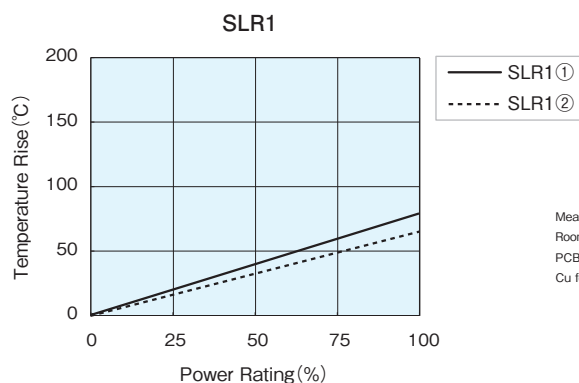


For resistors operated at an ambient temperature of 70°C or higher, the power shall be derated in accordance with the above derating curve.

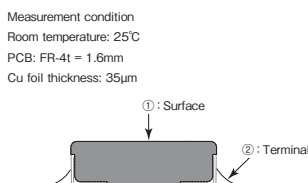


When the terminal part temperature of the resistor exceeds the rated terminal part temperature shown above, the power shall be derated according to the derating curve.  
 ※ Please refer to "Introduction of the derating curve based on the terminal part temperature" on the beginning of our catalog before use.

## Temperature Rise



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.

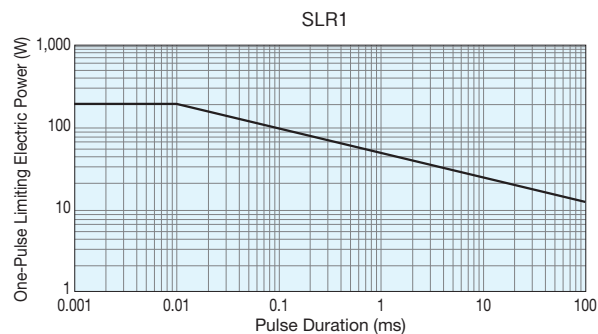


## One-Pulse Limiting Electric Power

The maximum applicable voltage is equal to the max. overload voltage.

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.



## Performance

Test Items	Performance Requirements $\Delta R \pm \%$		Test Methods
	Limit	Typical	
Resistance	Within specified tolerance	—	25°C
T.C.R.	Within specified T.C.R.	—	+25°C / +125°C
Overload (Short time)	1	0.1	Rated power×5 for 5s
Resistance to soldering heat	1	0.3	260°C±5°C, 10s±1s
Rapid change of temperature	1	0.4	-55°C(30min.)/+155°C(30min.)1000 cycles
Moisture resistance	2	0.2	40°C±2°C, 90%~95%Rh 1000h 1.5h ON/0.5h OFF cycles
Endurance at 70°C	2	0.2	70°C±2°C, 1000h 1.5h ON/0.5h OFF cycles