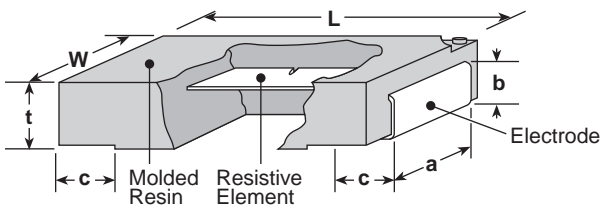


### features

- Surface mount type
- Flameproof UL94V0 molded polymer case
- Excellent dimension accuracy, mountability and shock resistance
- Marking: Black body color with white marking or laser marking
- Products with lead-free terminations meet EU RoHS requirements. EU RoHS regulation is not intended for Pb-glass contained in electrode, resistor element and glass.
- AEC-Q200 Qualified

### dimensions and construction



Size Code	Dimensions inches (mm)					
	L	W	t	a	b	c
SLW07 (2010)	.197±.012 (5.0±0.3)	.098±.008 (2.5±0.2)	.067±.008 (1.7±0.2)	.079±.008 (2.0±0.2)	.047±.008 (0.9±0.2)	.035±.012 (1.2±0.3)
SLW1 (2512)	.248±.012 (6.3±0.3)	.122±.008 (3.1±0.2)	.075±.008 (1.9±0.2)	.094±.008 (2.4±0.2)	.047±.008 (1.2±0.2)	.047±.012 (1.2±0.3)
SLN3 (4527)	.453±.012 (11.5±0.3)	.276±.008 (7.0±0.2)	.094±.008 (2.4±0.2)	.217±.008 (5.5±0.2)	.063±.008 (1.6±0.2)	.100±.016 (2.55±0.4)
<b>NEW</b> SLN5 (4527)	.453±.012 (11.5±0.3)	.276±.008 (7.0±0.2)	.098±.008 (2.5±0.2)	.217±.008 (5.5±0.2)	.075±.008 (1.9±0.2)	.100±.016 (2.55±0.4)

### ordering information

New Part #	SL	1	T	TE	10L0	F
Type	SL SLN	Size & Power Ratings W07: 1W W1: 1.5W 3: 3W New 5: 7W	Termination Material T: Sn	Packaging TE: Embossed plastic TED: 10" embossed plastic (SLN5 only) For further information on packaging please refer to Appendix A	Nominal Resistance ±0.5%, ±1%: 4 digits ±5%: 3 digits	Tolerance D: ±0.5% F: ±1% G: ±2% J: ±5%

### applications and ratings

Part Designation	Power Rating	T.C.R. (ppm/°C) Max.**	Resistance Range E-24*	Resistance Tolerance	Rated Terminal Part Temperature	Operating Temperature Range
SLW07	1W	0-200: R=<10mΩ 0-150: R=>11mΩ	5mΩ - 100mΩ	(F: ±1%) (J: ±5%)	125°C	-55°C to +180°C
SLW1	1.5W	±180: R=<13mΩ ±100: R=>15mΩ	10mΩ - 100mΩ	(D: ±0.5%)	120°C	
			5mΩ - 100mΩ	(F: ±1%)		
			3mΩ, 4mΩ 3mΩ ~ 100mΩ	(G: ±2%) (J: ±5%)		
SLN3	3W	±110: R<10mΩ ±75: R=>10mΩ	5mΩ - 110mΩ	(D: ±0.5%) (F: ±1%) (J: ±5%)	70°C (120°C)***	-65°C to +180°C
<b>NEW</b> SLN5	7W (5W)***	±110: R<10mΩ ±75: R=>10mΩ	5mΩ - 200mΩ	(D: ±0.5%) (F: ±1%)		

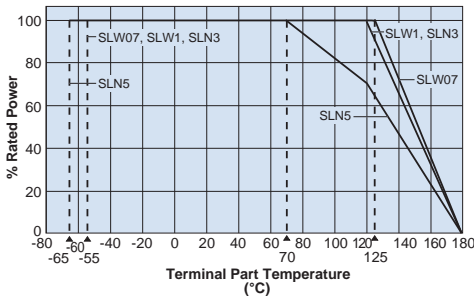
\* 5m, 6m, 7m, 8m, 9mΩ also available inside resistance range

\*\* Please contact factory for T.C.R.: ±50ppm/°C and ±75ppm/°C

\*\*\* In case the rated terminal part temperature of 120°C, the rated power shall be 5W

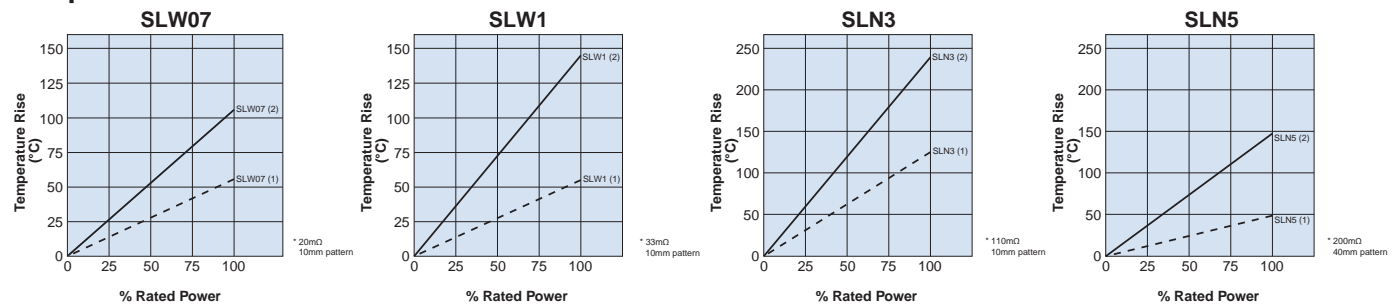
### environmental applications

#### Derating Curve

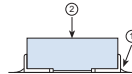


For resistors operated at a terminal part temperature of described for each size or above, a power rating shall be derated in accordance with the derating curve. Please refer to "Introduction of the derating curve based on the terminal part temperature" in the beginning of our catalog before use.

#### 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.



#### Performance Characteristics

Parameter	Requirement $\Delta R \pm\%$		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)	±1%: SLW07,SLW1 ±0.5%: SLN3 ±2%: SLN5	±1%: SLW07,SLW1 ±0.25%: SLN3 ±0.5%: SLN5	SLW07: Rated power x 3 for 5 seconds, SLW1: Rated power x 5 for 5 seconds, SLN3: Rated power x 10 for 5 seconds, SLN5: Rated power x 15 for 5 seconds
Resistance to Solder Heat	±1%: SLW07, SLW1	±1%: SLW07, SLW1	260°C ± 5°C, 10 ± 1 second
	±0.5%: SLN3,SLN5	±0.5%: SLN3,SLN5	260°C ± 5°C, 10~12 seconds
Rapid Change of Temperature	±1%: SLW07, SLW1	±0.5%: SLW07, SLW1	-55°C (30 minutes), +150°C (30 minutes), 100 cycles
	±0.5%: SLN3,SLN5	±0.3%: SLN3,SLN5	-55°C (15 minutes), +150°C (15 minutes), 1000 cycles
Moisture Resistance	±2%: SLW07, SLW1	±1%: SLW07, SLW1	40°C ± 2°C, 90%~95%RH, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle
	±0.5%: SLN3,SLN5	±0.35%: SLN3,SLN5	SLN3: 85°C ± 2°C, 85% RH, 1000 hours, 0.3W SLN5: 85°C ± 2°C, 85% RH, 1000 hours, 0.7W
Endurance of Rated Terminal Part Temperature	±2%	±1% ±1.2%: SLN5	Terminal part temperature: 125°C (SLW07), 120 °C (SLW1, SLN3, SLN5: 5W), 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle, 70°C (SLN5: 7W)
Low Temperature Exposure	±0.5%	±0.25%	SLW07, SLW1: -55°C, 1 hour; SLN3, SLN5: -65°C, 24 hours