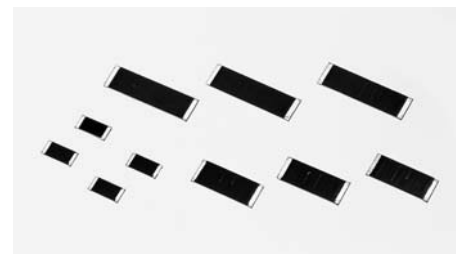


# SM TYPE Surface Mount Precision Plate Resistors



The SM type precision plate resistors are designed for surface mounting on board by soldering or the other.

## ADVANTAGES

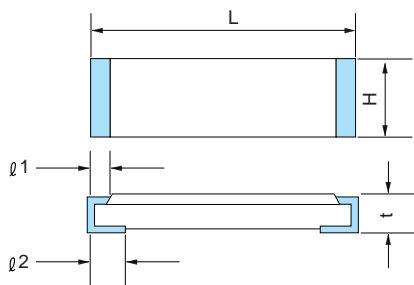
- Small temperature coefficient.
- Excellent moisture resistance.
- Excellent long-term stability.
- Useful as a high voltage load.

## CHARACTERISTICS

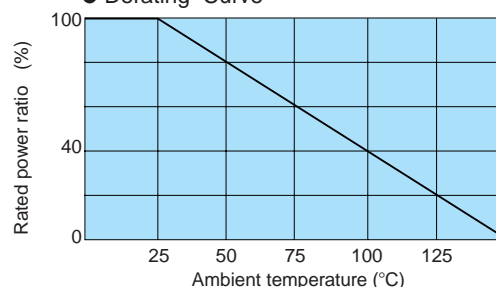
Item	Characteristics		Test method
	SM2	SM5~SM20	
Operating temperature range	-55°C~+150°C		
Temperature coefficient	∴ A B C D ±10 ±25 ±50 ±100 ppm/°C		Measured at 25°C and 75°C
Long-term stability	±0.5%	±0.1%	At normal temperature and humidity for 10,000hr.
Moisture resistance	±0.5%	±0.1%	40°C, 90 ~ 95%RH, 1,000hr.
Heat cycle	±0.5%	±0.1%	-55°C~+150°C 5cycles
Resistance to soldering heat	±0.5%	±0.1%	-260°C±5°C 10sec.

## PRODUCTION DATA

- Shape



- Derating Curve



Type	Characteristics		Range of resistance values		Rated power (W)	Max. working voltage DC (kV)	Voltage ∴ coefficient (ppm/V)	Dimensions (mm)					Resistance tolerance (%)
	Symbol	Temperature coefficient (ppm/°C)	Min. (MΩ)	Max. (MΩ)				L	H	t	l1	l2	
SM2	D	±100	0.5	50	0.125	0.3	<100	3.2 ±0.2	1.6 ±0.2	0.55 ±0.1	0.5 ±0.3	0.5 ±0.3	±1(F) ±2(G) ±5(J)
SM5	B	±25	0.5	10	0.5	1.0	<20	6.4 ±0.2	3.2 ±0.2	0.55 ±0.1	0.5 ±0.3	0.5 ±0.3	±0.1(B) ±0.25(C) ±0.5(D) ≦100MΩ
	C	±50	0.5	10									
	D	±100	0.5	1000									
SM10	B	±25	1	100	1.0	2.5	<5	12.8 ±0.2	5.0 ±0.2	0.8 ±0.2	1.0 ±0.3	2.0 ±0.2	
	C	±50	1	100									
	D	±100	1	1000									
SM15	D	±100	1	1000	1.5	3.5	<2	18.0 ±0.2	5.0 ±0.2	0.8 ±0.2	1.0 ±0.3	2.0 ±0.2	±1(F) ±2(G) ±5(J)
SM20	D	±100	1	1000	2.0	5.0	<1	25.5 ±0.2	5.0 ±0.2	0.8 ±0.2	1.0 ±0.3	2.0 ±0.2	±10(K) ≦1GΩ

NOTICE: ∴ Also consult your local dealer for the availability of resistors with a temperature coefficient of 'A' characteristic (±10ppm/°C).

∴ The voltage coefficient are measured at rated voltage and 1/10 rated voltage.