

# Surface Mount Precision Plate Resistors

The SM type precision plate resistors are designed for surface mounting on boards by soldering. Small temperature coefficient, excellent moisture resistance, excellent long-term stability and useful as a high voltage load.



## GENERAL SPECIFICATIONS

Model	Rated Power [W]	Maximum Working Voltage DC [kV]	Voltage Coefficient [ppm/V]	Resistance Range[MΩ]			Resistance Tolerance [%]
				B [±25ppm/°C]	C [±50ppm/°C]	D [±100ppm/°C]	
SM2	0.125	0.3	<100	-	-	0.5 ~ 50	F[±1], G[±2], J[±5]
SM5	0.5	1.0	<20	0.5 ~ 10	0.5 ~ 10	0.5 ~ 1000	* ≤100MΩ
SM10	1.0	2.5	<5	1 ~ 100	1 ~ 100	1 ~ 1000	B[±0.1], C[±0.25], D[±0.5]
SM15	1.5	3.5	<2	-	-	1 ~ 1000	* ≤1GΩ
SM20	2.0	5.0	<1	-	-	1 ~ 1000	F[±1], G[±2], J[±5], K[±10]

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

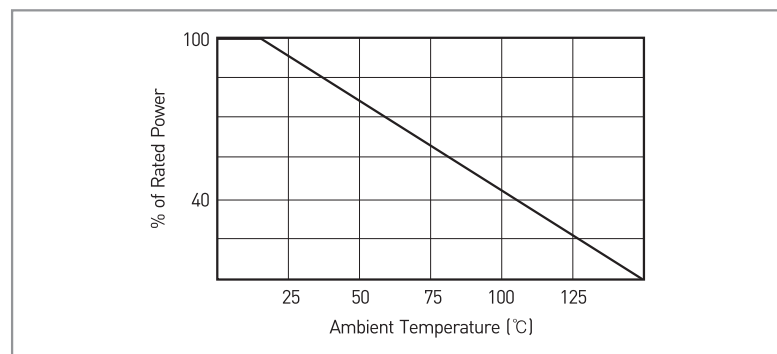
## CHARACTERISTICS

Values in [ ] mean change in Ω after test

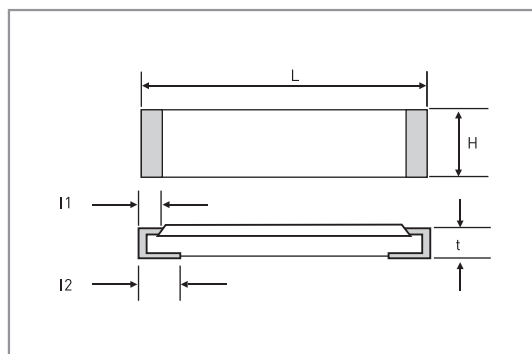
Operation Temperature Range	-55°C ~ +150°C	
Temperature Coefficient [ppm/°C]	*A [±10] / B [±25] / C [±50] / D [±100]	Measured at 25°C and 75°C
Long-Term Stability	±[0.1%+0.05Ω]	At normal temperature and humidity for 1000hours
Moisture Resistance	±[0.1%+0.05Ω]	40°C, 90~95% RH, 1000hours
Heat Cycle	±[0.1%+0.05Ω]	-55°C~+150°C, 5cycles
Resistance to Soldering Heat	±[0.1%+0.05Ω]	260±5°C, 10seconds

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

## DERATING CURVE



## SHAPE



## DIMENSIONS [mm]

Model	L	H	t	I1	I2
SM2	3.2±0.4	1.6±0.4	0.55±0.2	0.5±0.4	0.5±0.4
SM5	6.4±0.4	3.2±0.4			
SM10	12.8±0.4	5±0.4	0.8±0.3	1±0.4	2±0.4
SM15	18±0.4				
SM20	25.5±0.4				