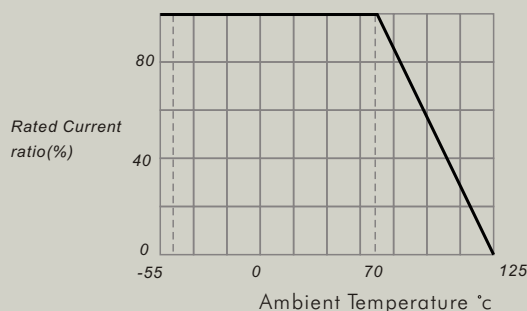


Characteristics Reference

DERATING CURVE

The power that the resistor can dissipate depends on the operating temperature. For operation at ambient temperature in excess of 70°C, the load should be derated in accordance with figure of Derating Curve.



PERFORMANCE CHARACTERISTIC

Item	Condition of test	Performance of requirement	
		CHIP Resistor	Jumper
DC Resistance	JIS C 5202 5.1/IEC 115-1 4.5	Within specified tolerance	< 50mΩ
Temperature Coefficient of Resistance	JIS C 5202 5.2/IEC 115-1 4.8.4.2 $T.C.R. = \frac{R - R_0}{R_0(t - t_0)} \times 10^6$ (ppm/°C) $t_0 = +25^\circ\text{C}$, $t = \text{Test temperature} (-55^\circ\text{C} \sim -125^\circ\text{C})$ $R_0 = \text{Resistance at } 25^\circ\text{C}$, $R = \text{Resistance at test temp.}$	See Ratings Table	---
Short-time Overload	JIS C 5202 5.5/IEC 115-1 4.13 Apply 2.5 times of rated voltage but not exceeding the maximum overload voltage for 5 seconds.	5%, $\Delta R/R: \pm(2.0\% + 0.1\Omega)$ max. 1%, $\Delta R/R: \pm(1.0\% + 0.05\Omega)$ max. No visible damage	< 50mΩ
Bending Strength	JIS C 5202 6.1 Mount the specimen on a 90mm glass epoxy resin PCB (FR4), Bending once for 10secs. > 2mm for 2512, 2010 > 3mm for 1206, 0805, 0603, 0402	$\Delta R/R: \pm(1.0\% + 0.05\Omega)$ No visible damage	< 50mΩ
Resistance to Soldering heat	JIS C 5202 6.4/IEC 115-1 4.18 Immerse the specimen in the solder pot at $260 \pm 5^\circ\text{C}$ for 10 ± 1 seconds.	5%, $\Delta R/R: \pm(1.0\% + 0.05\Omega)$ max. 1%, $\Delta R/R: \pm(0.5\% + 0.05\Omega)$ max. No visible damage	< 50mΩ
Solderability	JIS C 5202 6.5/IEC 115-1 4.17 Dipping the specimen in the solder pot at $235 \pm 5^\circ\text{C}$ for 2 ± 1 seconds.	At least 95% of the terminal surface must be covered by new solder.	As left
Temperature Cycle	JIS C 5202 7.4/IEC 115-1 4.19 In sequence, at room temperature, $-55^\circ\text{C}/30\text{min.}$, $25^\circ\text{C}/2\text{min.}$, $+125^\circ\text{C}/30\text{min.}$, $25^\circ\text{C}/2\text{min.}$ as a cycle, perform 5 cycles.	5%, $\Delta R/R: \pm(1.0\% + 0.05\Omega)$ max. 1%, $\Delta R/R: \pm(0.5\% + 0.05\Omega)$ max. No visible damage	< 50mΩ
Load Life in Humidity	JIS C 5202 7.9/IEC 115-1 4.24.2 Apply the rated voltage of 1.5 hours "ON" and 0.5 hour "OFF" cycle at $40 \pm 2^\circ\text{C}$ and 90~95%RH for 1000+48/-0 hours.	5%, $\Delta R/R: \pm(3.0\% + 0.1\Omega)$ max. 1%, $\Delta R/R: \pm(1.0\% + 0.05\Omega)$ max. No visible damage	< 100mΩ
Load Life	JIS C 5202 7.10/IEC 115-1 4.25.1 Apply the rated voltage of 1.5 hours "ON" and 0.5 hour "OFF" cycle at $70 \pm 2^\circ\text{C}$ for 1000+48/-0 hours.	5%, $\Delta R/R: \pm(3.0\% + 0.1\Omega)$ max. 1%, $\Delta R/R: \pm(1.0\% + 0.05\Omega)$ max. No visible damage	< 100mΩ
Insulation Resistance	JIS C 5202 5.6 Place the specimen the jig and apply a maximum working DC voltage for one minute.	1000MΩ minimum	As left
Voltage Proof	JIS C 5202 5.7 Place the specimen the jig and apply a maximum working AC voltage for one minute.	No abnormalities such as flashover or Breakdown on appearance.	As left