## 0603 1\% Chip Resistors

## Introduction:

Chip resistors consist of a deposited resistive paste on ceramic body and two wrapping end of the resistor to wave soldering.

## Features:

- The resistive layer is covered with a protective coating to assure mechanical and environmental integrity.
- Excellent mechanical strength and electrical stability due to special electrode construction.
- Accurate and uniformed physical dimensions.


## Dimensions:



## Construction:



## Ratings:

| Power rating | 100 mW |
| :--- | :---: |
| Max. working voltage: | 50 V |
| Max. overload voltage: | 100 V |
| Operating temperature range: | $-55^{\circ} \mathrm{C}$ to $+125^{\circ} \mathrm{C}$ |
| Resistance tolerance: | $1 \%$ |

## Power derating curve:

For resistors operated in ambient temperatures above $70^{\circ} \mathrm{C}$, power rating must be derated in accordance with the curve below.


## Characteristics:

| Requirements | Characteristics | Test method |  |
| :--- | :---: | :---: | :---: |
|  |  | JIS C 5202 | E1AJ 2690 |
| Temp. coefficient $\left(\mathrm{ppm} /{ }^{\circ} \mathrm{C}\right):$ | $< \pm 300$ | 5.2 | - |
| Terminal strength: | $\pm(1 \%+0.05 \Omega)$ | - | 6.5 |
|  | Over $1 \mathrm{Kg} / \mathrm{mm}^{2}$ | - | - |
| Resistance to soldering heat: | $\pm(1 \%+0.05 \Omega)$ | $6.4270^{\circ} \mathrm{C} / 10 \mathrm{sec}$. | - |
| Short time overload: | $\pm(1 \%+0.05 \Omega)$ | 5.5 A | - |
| Intermittent overload: | $\pm(2 \%+0.05 \Omega)$ | 5.8 | - |
| Temperature cycling: | $\pm(2 \%+0.2 \Omega)$ | - | 6.8 |
| Load life: | $\pm(3 \%+0.1 \Omega)$ | $7.101,000 \mathrm{Hr}$ | - |
| Moisture resistance: | $\pm(2 \%+0.05 \Omega)$ | $7.91,000 \mathrm{Hr}$ | - |
| Electrode solderability: | $>95 \% \operatorname{coverage}$ | $6.5230^{\circ} \mathrm{C} / 5 \mathrm{sec}$. | - |
| Insulation resistance: | $10 \mathrm{M} \Omega$ min. | - | - |
| Dielectric withstanding voltage: | $500 \mathrm{~V} / \mathrm{minute}$ | - | - |
| Vibration: | $\pm 1 \%$ | - | - |

Taping specifications:


Reel dimensions:


