## RoHS compliant parts

## Superhigh Precision Hermetically Sealed Resistors



The RHA type resistors are hermetically sealed resistors which exhibit excellent long-term stability and moisture resistance even at high resistance value.

## - FEATURES

Oxtremely low temperature coefficient.
-Small in size, light weight and high reliability.
Excellent moisture resistance and long-term stability.
A wide range of resistance values are stably obtained.

## -CHARACTERISTICS

| Item | Characteristics |  |  |  | Test method |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\leqq 100 \mathrm{M} \Omega$ |  | $\leqq 1 \mathrm{G} \Omega$ | $\leqq 10 \mathrm{G} \Omega$ |  |
| Operating temperature range | $-30^{\circ} \mathrm{C} \sim+75^{\circ} \mathrm{C}$ |  |  |  |  |
| Voltage coefficient | Max.-2ppm/V |  |  | Max.-5ppm/V | Rated voltage and $1 / 10$ of rated voltage |
| Resistance to soldering heat | $\pm 0.1 \%$ |  |  | $\pm 0.2 \%$ | $350^{\circ} \mathrm{C}$ for 3 sec. |
| Load life | $\pm 0.2 \%$ |  |  | $\pm 0.5 \%$ | Rated voltage for 1,000hr. |
| Long-term stability | $\pm 0.1 \%$ |  | $\pm 0.2 \%$ | $\pm 0.5 \%$ | At normal temperature and humidity for 10,000hr. |
| Moisture resistance | $\pm 0.1 \%$ |  | $\pm 0.2 \%$ | $\pm 0.5 \%$ | $40^{\circ} \mathrm{C} \quad 90 \sim 95 \% \mathrm{RH}$ for 3,000 hr . |
| Temperature coefficient | $\begin{array}{cc} \text { ※A } & \text { B } \\ \pm 10 & \pm 25 \end{array}$ | $\begin{gathered} C \\ \pm 50 \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 100 \mathrm{ppm} /{ }^{\circ} \mathrm{C} \end{gathered}$ | $\begin{array}{cc} \mathrm{D} & \mathrm{~S} \\ \pm 100 & \pm 200 \mathrm{ppm} /{ }^{\circ} \mathrm{C} \end{array}$ | Measured at $25^{\circ} \mathrm{C}$ and $75^{\circ} \mathrm{C}$ |

## PRODUCTION DATA

Shape


In RHA type, both side of hermetically sealed with solder.


| Type | Characteristics |  | Range of resistance values |  | Max. working voltage DC (kV) | Dimensions (mm) |  |  |  | Resistance tolerance (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Symbol | Temperature coefficient (ppm/ ${ }^{\circ} \mathrm{C}$ ) | Min. (M $\Omega$ ) | Max. (M $\Omega$ ) |  | L | D | $\ell$ | d |  |
| RHA2 | B | $\pm 25$ | 0.1 | 100 | 2 | $14 \pm 0.5$ | $5.1 \pm 0.2$ | $38 \pm 3$ | $0.8 \pm 0.05$ | $\begin{aligned} & \pm 0.1 \quad(B) \leqq 100 \mathrm{M} \\ & \pm 0.25(C) \leqq 500 \mathrm{M} \end{aligned}$ |
|  | C | $\pm 50$ | 0.1 | 500 |  |  |  |  |  |  |
|  | D | $\pm 100$ | 0.1 | 2000 |  |  |  |  |  |  |
|  | S | $\pm 200$ | 0.1 | 10000 |  |  |  |  |  |  |
| RHA3 | B | $\pm 25$ | 0.1 | 100 | 5 | $27 \pm 0.5$ | $6.5 \pm 0.2$ | $38 \pm 3$ | $1 \pm 0.05$ | $\pm 0.5$ (D) $\leqq 1 \mathrm{G}$ |
|  | C | $\pm 50$ | 0.1 | 500 |  |  |  |  |  | $\pm 1(\mathrm{~F})$ |
|  | D | $\pm 100$ | 0.1 | 2000 |  |  |  |  |  | $\pm 2(G)$ |
|  | S | $\pm 200$ | 0.1 | 10000 |  |  |  |  |  |  |
| RHA5 | B | $\pm 25$ | 0.1 | 100 | 10 | $42 \pm 0.5$ | $6.5 \pm 0.2$ | $38 \pm 3$ | $1 \pm 0.05$ |  |
|  | C | $\pm 50$ | 0.1 | 500 |  |  |  |  |  |  |
|  | D | $\pm 100$ | 0.1 | 2000 |  |  |  |  |  |  |
|  | S | $\pm 200$ | 0.1 | 10000 |  |  |  |  |  |  |

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[^0]:    NOTICE : ※Also consult your local dealer for the availability of resistors with a temperature coefficient of "A" characteristic.

