

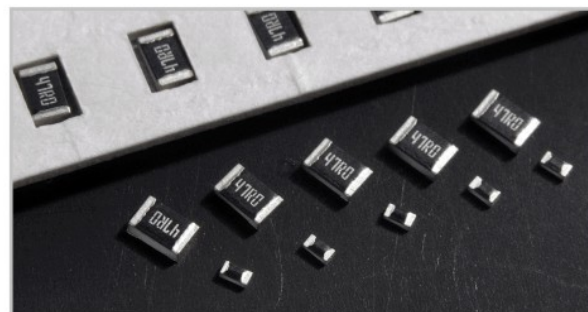
RB Thin Film Chip Resistors (RB series Standard)

(Halogen Free)
RoHs
Compliant

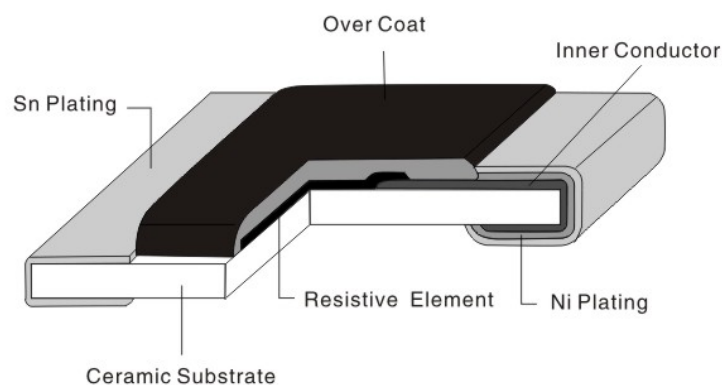
(Halogen Free)
RoHs
Compliant

Features

- Precision of $\pm 0.1\%$ is available
- Low T.C.R. $\pm 25\text{ppm}$ is available
- Low current noise



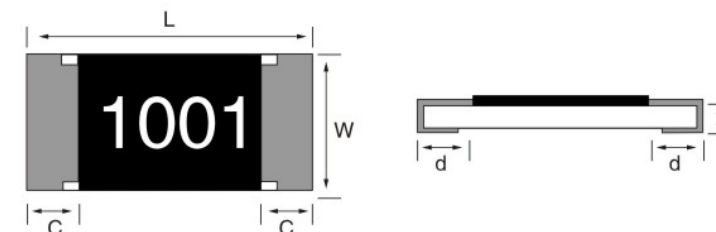
Construction



Type Designation

| RB | 06 | T | P | 1001 | B |
|-----------------------------|---|-----------------------------------|--|--|---|
| Product Code | Size Power Rating (at 70°C) | Packaging | TCR (ppm/°C) | Nominal Resistance | Tolerance |
| Thin Film Chip Resistors | 04:0402(1.0×0.5mm) 1/16W 06:0603(1.6×0.8mm) 1/10W 08:0805(2.0×1.2mm) 1/8W 12:1206(3.2×1.6mm) 1/4W 13:1210(3.2×2.6mm) 1/5W 20:2010(5.0×2.5mm) 1/4W 25:2512(6.4×3.2mm) 1/2W | T: Paper Tape B: Bulk Cassette | J: $\pm 5\text{ppm}$ K: $\pm 10\text{ppm}$ M: $\pm 15\text{ppm}$ P: $\pm 25\text{ppm}$ S: $\pm 50\text{ppm}$ R: $\pm 100\text{ppm}$ | 4 Digits(E-96) e.g., 1001=1k Ω | A: $\pm 0.05\%$ B: $\pm 0.10\%$ C: $\pm 0.25\%$ D: $\pm 0.50\%$ F: $\pm 1.00\%$ |

Dimensions



Unit:mm

| Type | L | W | C | d | t |
|------|-----------------|-----------------|-----------------|--|-----------------|
| RB04 | 1.00 \pm 0.05 | 0.50 \pm 0.05 | 0.20 \pm 0.10 | 0.25 \pm 0.10 | 0.35 \pm 0.05 |
| RB06 | 1.60 \pm 0.10 | 0.8 \pm 0.10 | 0.30 \pm 0.20 | 0.30 ^{+0.20} _{-0.10} | 0.45 \pm 0.10 |
| RB08 | 2.00 \pm 0.10 | 1.25 \pm 0.10 | 0.40 \pm 0.20 | 0.40 \pm 0.20 | 0.50 \pm 0.10 |
| RB12 | 3.10 \pm 0.10 | 1.55 \pm 0.10 | 0.50 \pm 0.30 | 0.40 \pm 0.20 | 0.55 \pm 0.10 |
| RB13 | 3.10 \pm 0.10 | 2.55 \pm 0.10 | 0.50 \pm 0.30 | 0.40 \pm 0.20 | 0.60 \pm 0.10 |
| RB20 | 5.00 \pm 0.15 | 2.50 \pm 0.15 | 0.60 \pm 0.30 | 0.50 \pm 0.25 | 0.60 \pm 0.10 |
| RB25 | 6.30 \pm 0.20 | 3.20 \pm 0.20 | 0.60 \pm 0.30 | 0.50 \pm 0.25 | 0.60 \pm 0.10 |

Rating & Characteristic

| Type | Power Rating at 70°C | Rated Voltage | Max. Working Voltage | Max. Over-Load Voltage | T.C.R (PPM/°C) | Resistance Range | Resistance tolerance (%) |
|------|----------------------|----------------------|----------------------|------------------------|---|---|--|
| RB04 | 1/16W | (P*R) ^{1/2} | 50V | 100V | ± 10 ± 25 ± 50 ± 100 | 10 Ω -100k Ω | ± 0.1 ~ ± 1.0 |
| RB06 | 1/10W | (P*R) ^{1/2} | 75V | 150V | ± 50 ± 100 | 1 Ω -9.1 Ω | ± 0.5 ~1 |
| RB06 | 1/10W | (P*R) ^{1/2} | 75V | 150V | ± 10 ± 25 ± 50 ± 100 | 10 Ω -390k Ω | ± 0.1 ~ ± 1.0 |
| RB08 | 1/8W | (P*R) ^{1/2} | 150V | 300V | ± 50 ± 100 | 1 Ω -9.1 Ω | ± 0.5 ~10 |
| RB08 | 1/8W | (P*R) ^{1/2} | 150V | 300V | ± 10 ± 25 ± 50 ± 100 | 10 Ω -800k Ω | ± 0.1 ~ ± 1.0 |
| RB12 | 1/4W | (P*R) ^{1/2} | 150V | 300V | ± 50 ± 100 | 1 Ω -9.1 Ω | ± 0.5 ~1 |
| RB12 | 1/4W | (P*R) ^{1/2} | 150V | 300V | ± 10 ± 25 ± 50 ± 100 | 10 Ω -1M Ω | ± 0.1 ~ ± 1.0 |
| RB13 | 1/5W | (P*R) ^{1/2} | 150V | 300V | ± 25 ± 50 | 4.7 Ω -1M Ω | ± 0.05 |
| RB20 | 1/4W | (P*R) ^{1/2} | 150V | 300V | ± 25 ± 50 | 4.7 Ω -1M Ω 4.7 Ω -3M Ω 1 Ω -3M Ω | ± 0.05 ± 0.1 ± 0.25 ~ ± 0.50 |
| RB25 | 1/2W | (P*R) ^{1/2} | 150V | 300V | ± 25 ± 50 | 4.7 Ω -1M Ω 4.7 Ω -3M Ω 1 Ω -3M Ω | ± 0.05 ± 0.1 ± 0.25 ~ ± 0.50 |

Operating Temp(°C): -55°C~+125°C

Note: 1. $E = \sqrt{P \cdot R}$. E=Rated Voltage(V); P=Rated Power(W); R=Resistance Value(Ω)

2. Except for the above standardized products, we also provide the customized products.