

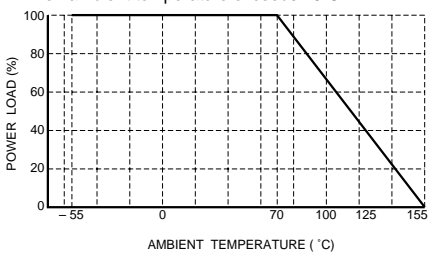
Chip trimmer potentiometers

MVR21

●Features

- 1) Extremely small size and light weight facilitate the assembly of light, thinner, and smaller equipment.
- 2) Close match between wiper and resistive element reduces wiper noise.
- 3) Ruthenium oxide resistor material, with superb stability and resistance to humidity and the elements, offers the same outstanding reliability of our existing product (MVR22).
- 4) Open design for reflow soldering.
- 5) Cross groove for easy adjustment.
- 6) Protective film prevents short circuits due to terminal contact.
- 7) ROHM resistors have approved ISO-9001 / ISO/TS 16949 certification. Design and specifications are subject to change without notice. Carefully check the specification sheet supplied with the product before using or ordering it.

●Ratings

| Item | Conditions | Specifications | | |
|--------------------------------|---|--|------------------------|-----|
| Rated power | <p>Power must be derated according to the power derating curve in Figure 1 when ambient temperature exceeds 70°C.</p>  <p style="text-align: center;">Fig.1</p> | 0.15W (3 / 20W) / element at 70°C | | |
| Rated voltage | <p>The voltage rating is calculated by the following equation. If the value obtained exceeds the maximum operating voltage, the voltage rating is equal to the maximum operating voltage.</p> $E = \sqrt{P \times R}$ <p>E : Rated voltage (V) P : Rated power (W) R : Nominal resistance (Ω)</p> | <table border="1"> <tr> <td>Max. operating voltage</td> <td>50V</td> </tr> </table> | Max. operating voltage | 50V |
| Max. operating voltage | 50V | | | |
| Nominal total resistance range | | 100 to 2.2MΩ (recommended resistance value : E3 series) (applicable resistance value : E6 series) | | |
| Total resistance tolerance | | ±25% | | |
| Resistance variation | | B (linear) characteristics | | |
| Operating temperature | | -55°C to +155°C | | |

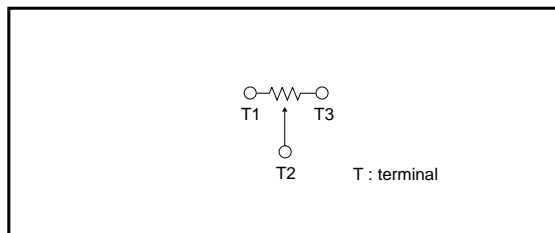
Resistors

●Dimensions (Unit: mm)

| Name of part | Material |
|------------------------------|--|
| ① Substrate | Alumina substrate |
| Resistance paste | Thick film resistive element |
| ② Wiper | Metal |
| ③ 2nd Terminal (T2) | Metal and Ni plating and Sn plating |
| ④ 1st,3rd Terminals (T1, T3) | Metal and Ni plating and SnAgCu solder |
| ⑤ Protective film | Insulator |

| A | (B) | C | D | E | F | G |
|---------------------------------------|------------|----------|-----------|-----------------------------------|------------------------------------|-------------------------------------|
| 2.0 ^{+0.15} _{-0.05} | (1.35±0.2) | 1.5±0.2 | 2.85±0.15 | 0.4 ^{+0.05} ₀ | 1.35 ^{+0.05} ₀ | 0.75 ^{+0.15} ₋₀ |
| H | I | J | K | L | M | N |
| 0.9±0.1 | 1.0±0.1 | 0.55±0.1 | 0.6±0.2 | 0.75±0.1 | 1.02±0.1 | 0.48±0.1 |

●Equivalent circuit

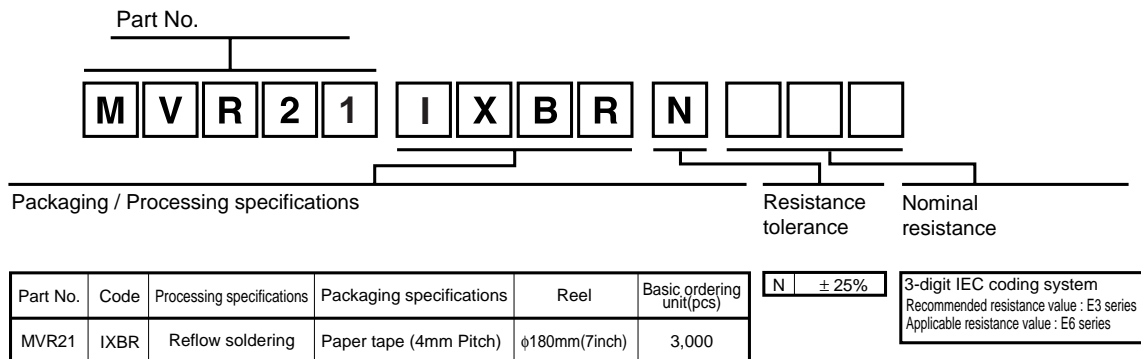


●Packaging

| Reel | Taping | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--------------------------------|----------------|----------------|-----------------------------------|---------------------------------|--------------------------------|------------|-----------|--|---|---|---|----------------|----------------|-----------|------------|------------|------------|-----------|----------------|----------------|----------------|----------------|---|-----------------------------------|-----------|-----------|------------|-----------------------------------|
| <p>Compatible with JEITA standard "EIAJ ET-7200B"</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>(Unit : mm)</p> <table border="1"> <thead> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> </tr> </thead> <tbody> <tr> <td>φ180⁰₋₃</td> <td>φ60⁺¹₀</td> <td>9 ± 1.0/-0</td> <td>φ13 ± 0.2</td> </tr> </tbody> </table> | A | B | C | D | φ180 ⁰ ₋₃ | φ60 ⁺¹ ₀ | 9 ± 1.0/-0 | φ13 ± 0.2 | <p>(Unit : mm)</p> <table border="1"> <thead> <tr> <th>W</th> <th>F</th> <th>E</th> <th>A₀</th> <th>B₀</th> </tr> </thead> <tbody> <tr> <td>8.0 ± 0.2</td> <td>3.5 ± 0.05</td> <td>1.75 ± 0.1</td> <td>2.45 ± 0.1</td> <td>3.2 ± 0.1</td> </tr> <tr> <th>D₀</th> <th>P₀</th> <th>P₁</th> <th>P₂</th> <th>K</th> </tr> <tr> <td>φ1.5^{+0.1}₀</td> <td>4.0 ± 0.1</td> <td>4.0 ± 0.1</td> <td>2.0 ± 0.05</td> <td>1.8⁺⁰_{-0.1}</td> </tr> </tbody> </table> | W | F | E | A ₀ | B ₀ | 8.0 ± 0.2 | 3.5 ± 0.05 | 1.75 ± 0.1 | 2.45 ± 0.1 | 3.2 ± 0.1 | D ₀ | P ₀ | P ₁ | P ₂ | K | φ1.5 ^{+0.1} ₀ | 4.0 ± 0.1 | 4.0 ± 0.1 | 2.0 ± 0.05 | 1.8 ⁺⁰ _{-0.1} |
| A | B | C | D | | | | | | | | | | | | | | | | | | | | | | | | | | |
| φ180 ⁰ ₋₃ | φ60 ⁺¹ ₀ | 9 ± 1.0/-0 | φ13 ± 0.2 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| W | F | E | A ₀ | B ₀ | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.0 ± 0.2 | 3.5 ± 0.05 | 1.75 ± 0.1 | 2.45 ± 0.1 | 3.2 ± 0.1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| D ₀ | P ₀ | P ₁ | P ₂ | K | | | | | | | | | | | | | | | | | | | | | | | | | |
| φ1.5 ^{+0.1} ₀ | 4.0 ± 0.1 | 4.0 ± 0.1 | 2.0 ± 0.05 | 1.8 ⁺⁰ _{-0.1} | | | | | | | | | | | | | | | | | | | | | | | | | |

Resistors

●Part No. Explanation



Notes

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