## Features

- High safety standard
- High purity ceramic core
- Excellent non-flame coating
- Meet EIAJ-RC2655A requirements
- Stable performance in diverse environment
- Too low or too high ohmic value can be supplied on a case to case basis

### Ordering Procedure: (Ex.: TMOV 5W, +/-5%, 1KΩ, B/B)

<table>
<thead>
<tr>
<th>T</th>
<th>M</th>
<th>O</th>
<th>V</th>
<th>5</th>
<th>W</th>
<th>J</th>
<th>0</th>
<th>1</th>
<th>0</th>
<th>2</th>
<th>B</th>
<th>0</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resistor Type:</td>
<td>Wattage:</td>
<td>Resistance Value:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TMOV = Terminal type</td>
<td>3W = 3W</td>
<td>E-24 series: the 1st digit is &quot;0&quot;, the</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOR resistor - VERTICAL</td>
<td>5W = 5W</td>
<td>2nd &amp; 3rd digits are for the significant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TMOR = Terminal type</td>
<td>7W = 7W</td>
<td>figures of the resistance and the 4th</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOR resistor - RADIAL</td>
<td></td>
<td>indicate the number of zeros.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Tolerance:
- J = ±5%
- K = ±10%

### Packing Type:
- B = Bulk / Box Only

### Packing Qty:
- 0 = for Bulk / Box packing

### Additional Information:
- 0 = NIL, TMOV
- 0 = TMOR, H = 29mm
- L = TMOR, H = 39mm

*More explanation on part no, please see details on pages 79-80.*

## Performance Specifications

- **Temperature coefficient**
  - < 20Ω: ±400PPM/°C; ≥ 20Ω: ±350PPM/°C
  - ∆R/R ±(2.0% + 0.05Ω), with no evidence of mechanical damage.
- **Short-time overload**
  - No evidence of flashover, mechanical damage, arcing or insulation breakdown.
  - ∆R/R ±(5.0% + 0.05Ω), with no evidence of mechanical damage.
- **Terminal strength**
  - No evidence of mechanical damage.
- **Resistance to soldering heat**
  - ∆R/R ±(1.0% + 0.05Ω), with no evidence of mechanical damage.
- **Solderability**
  - Min. 95% coverage
- **Resistance to solvent**
  - No deterioration of protective coating and marking.
- **Temperature cycling**
  - ∆R/R ±(2.0% + 0.05Ω), with no evidence of mechanical damage.
- **Load life in humidity**
  - ±(5.0% + 0.05Ω)
  - ±(5.0% + 0.05Ω)
- **Load life**
  - ±(5.0% + 0.05Ω)
- **Non-Flame**
  - No evidence of flaming or arcing.

*More details, please see pages 77-78.*
### Terminal Type of Metal Oxide Film Fixed Resistors

#### Derating Curve

![Derating Curve Graph](image)

#### Heat Rise Chart

![Heat Rise Chart Graph](image)

#### (1) Vertical Type MOR Resistors

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Style</th>
<th>Power Rating at 70°C</th>
<th>Dimension (mm)</th>
<th>Max. Working Voltage</th>
<th>Max. Overload Voltage</th>
<th>Max. Pulse Overload Voltage</th>
<th>Resistance Range</th>
<th>Resistance Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>TMOV5W</td>
<td>TMOV-500</td>
<td>5W</td>
<td>D ± 1 L ± 1</td>
<td>500V</td>
<td>800V</td>
<td>1,500V</td>
<td>≤10Ω</td>
<td>±10%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10Ω – 10KΩ</td>
<td>±5%</td>
</tr>
<tr>
<td>TMOV7W</td>
<td>TMOV-700</td>
<td>7W</td>
<td>7</td>
<td>500V</td>
<td>800V</td>
<td>1,500V</td>
<td>≤10Ω</td>
<td>±10%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td>10Ω – 10KΩ</td>
<td>±5%</td>
</tr>
<tr>
<td>TMOR3W</td>
<td>TMOR-300</td>
<td>3W</td>
<td>6</td>
<td>350V</td>
<td>600V</td>
<td>1,000V</td>
<td>≤10Ω</td>
<td>±10%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td>10Ω – 10KΩ</td>
<td>±5%</td>
</tr>
<tr>
<td>TMOR5W</td>
<td>TMOR-500</td>
<td>5W</td>
<td>7</td>
<td>500V</td>
<td>800V</td>
<td>1,500V</td>
<td>≤10Ω</td>
<td>±10%</td>
</tr>
<tr>
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<td></td>
<td></td>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td>10Ω – 10KΩ</td>
<td>±5%</td>
</tr>
</tbody>
</table>

*Mounting hole dimensions on P.C.B (Reference)*

#### (2) Radial Type MOR Resistors

![Radial Type MOR Resistors Diagram](image)

*Mounting hole dimensions on P.C.B (Reference)*

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