High Voltage Dividers Series 300 introduce Nicrom Electronic's exclusive advanced proprietary high voltage resistor technology which increases the allowable working voltage over the length of the high voltage section.

These specifications can provide important improvements in performance in many types of advanced electronic systems, including TWT power supplies, radar systems, X-ray systems, analytical equipment and high resolution CRT displays.

Precision High Voltage Dividers Series 300 are available in a broad range of custom resistance values, voltage ratios, voltage ratings, ratio tolerances and ratio temperature coefficients.

### Characteristics

- **Resistance Values**
  - from 1KΩ to as high as 100GΩ on all models
- **Absolute Tolerances**
  - 0.05%, 0.1%, 0.25%, 0.5%, 1%, 2%, 5%, 10% (0.05% avail. to 10G, 0.25% to 100G, other on request)
- **Ratio Tolerances**
  - 0.05%, 0.1%, 0.25%, 0.5%, 1% (0.02% on request)
- **Absolute TC**
  - 5, 10, 15, 25, 50 and 100 ppm/°C (10 ppm/°C available to 10G, 25 ppm/°C to 100G, other on request)
- **Ratio TC**
  - 5 ppm/°C, 10 ppm/°C, 15 ppm/°C, 25 ppm/°C or 50 ppm/°C
- **Operating Temperature**
  - -55 .. +175°C (extended temperature range to 300°C available)
- **Insulation Resistance**
  - > 10'000 MΩ
- **Dielectric Strength**
  - > 1’000 Volt
- **Thermal Shock**
  - Δ R/R < 0.1% typ., 0.20% max.
- **Overload**
  - Δ R/R < 0.1% typ., 0.25% max.
- **Moisture Resistance**
  - Δ R/R < 0.1% typ., 0.25% max.
- **Load Life**
  - Δ R/R < 0.05% typ., 0.25% max.
- **Encapsulation**
  - Screen Printed Silicone
- **Lead Material**
  - Tinned Copper
- **Resistor Material**
  - Ruthenium Oxide

### Voltage Coefficients of Resistance

<table>
<thead>
<tr>
<th>Type</th>
<th>Resistance Range</th>
<th>VCR (ppm/V)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>300.2</td>
<td>1K .. 500M</td>
<td>&lt; 0.35</td>
</tr>
<tr>
<td></td>
<td>500M .. 7G</td>
<td>&lt; 0.90</td>
</tr>
<tr>
<td>300.3</td>
<td>1K .. 1G</td>
<td>&lt; 0.20</td>
</tr>
<tr>
<td></td>
<td>1G .. 10G</td>
<td>&lt; 0.40</td>
</tr>
<tr>
<td>300.4</td>
<td>1K .. 1G</td>
<td>&lt; 0.10</td>
</tr>
<tr>
<td></td>
<td>1G .. 20G</td>
<td>&lt; 0.30</td>
</tr>
<tr>
<td>300.5</td>
<td>1K .. 1.5G</td>
<td>&lt; 0.07</td>
</tr>
<tr>
<td></td>
<td>1.5G .. 30G</td>
<td>&lt; 0.20</td>
</tr>
<tr>
<td>300.7</td>
<td>1K .. 2G</td>
<td>&lt; 0.05</td>
</tr>
<tr>
<td></td>
<td>2G .. 40G</td>
<td>&lt; 0.15</td>
</tr>
</tbody>
</table>

* typical values, contact factory for details

### Derating Curve

![Derating Curve Graph](image-url)