High Voltage Dividers Series 600
Precision, Non-Inductive, Low TC

High Voltage Dividers Series 600 combine proprietary non-inductive resistance system and design to achieve low ratio temperature coefficient, low voltage coefficients, tight ratio tolerances, high stability and increased high operating voltages. These Precision High Voltage Dividers can provide important improvements in performance in many types of advanced electronic systems, including power supplies, radar systems, X-ray systems, analytical equipment and geophysical instruments.

![Diagram of High Voltage Divider](image)

**Characteristics**

<table>
<thead>
<tr>
<th>Model</th>
<th>Wattage</th>
<th>Max. Operating Voltage</th>
<th>Dimensions in millimeters ± 1.00</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>[Dimensions in inches ± 0.04]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>L (max.)</td>
</tr>
<tr>
<td>600.10</td>
<td>10.00</td>
<td>30'000</td>
<td>81.00</td>
</tr>
<tr>
<td>600.20</td>
<td>15.00</td>
<td>70'000</td>
<td>156.00</td>
</tr>
<tr>
<td>600.100</td>
<td>75.00</td>
<td>120'000</td>
<td>308.00</td>
</tr>
</tbody>
</table>

**Resistance Values**
from 1KΩ to as high as 100GΩ on all models (to 1TΩ on request)

**Ratios**
from 1:100 to 1:10'000, other on request

**Absolute Tolerances**
0.05%, 0.1%, 0.25%, 0.5%, 1%, 2%, 5% (0.05% avail. to 10G, 0.25% to 100G, other on request)

**Ratio Tolerances**
0.05%, 0.1%, 0.25%, 0.5%, 1% (other on request)

**Absolute Temp. Coeff.**
5, 10, 15, 25, 50 and 100 ppm/°C (10 ppm/°C available to 10G, 25 ppm/°C to 100G, other on request)

**Ratio Temp. Coeff.**
5, 10, 15, 25 and 50 ppm/°C

**Operating Temperature**
-55 .. +175°C (extended temperature range to 350°C available)

**Insulation Resistance**
> 10'000 MQ 500 Volt 25 °C 75% relative humidity

**Dielectric Strength**
> 1'000 Volt 25 °C 75% relative humidity

**Thermal Shock**
Δ R/R < 0.1% typ., 0.20% max. MIL Std. 202, method 107 Cond. C IEC 68 - 2 - 14

**Overload**
Δ R/R < 0.1% typ., 0.25% max. 1.5 x Pnom, 5 sec (do not exceed max. voltage)

**Moisture Resistance**
Δ R/R < 0.1% typ., 0.25% max. MIL Std. 202, method 106 IEC 68 - 2 - 3

**Load Life**
Δ R/R < 0.1% typ., 0.25% max. 1000 hours at rated power IEC 115 - 1

**Encapsulation**
Silicone Conformal Coating Core Material

**Lead Material**
Brass Caps (lug terminations avail.) Resistor Material Ruthenium Oxide

* Temperature Coefficients referenced to 25°C, JR taken at +125°C

**Voltage Coefficients of Resistance**

<table>
<thead>
<tr>
<th>Type</th>
<th>Resistance Range</th>
<th>VCR (-ppm/V)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>600.10</td>
<td>1K .. 1G5</td>
<td>&lt; 0.09</td>
</tr>
<tr>
<td></td>
<td>1G5 .. 15G</td>
<td>&lt; 0.18</td>
</tr>
<tr>
<td>600.20</td>
<td>1K .. 3G5</td>
<td>&lt; 0.04</td>
</tr>
<tr>
<td></td>
<td>3G5 .. 35G</td>
<td>&lt; 0.08</td>
</tr>
<tr>
<td>600.100</td>
<td>1K .. 6G</td>
<td>&lt; 0.02</td>
</tr>
<tr>
<td></td>
<td>6G .. 60G</td>
<td>&lt; 0.03</td>
</tr>
</tbody>
</table>

* typical values, contact factory for details

**Derating Curve**

![Derating Curve Graph](image)

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Specifications subject to changes without notice