250 RMI-V Radial Aluminum Electrolytic Capacitors
Low Impedance, High Vibration Capability

KEY BENEFITS

• Very long useful life: 7000 h to 10 000 h at 105 °C, high stability, high reliability
• Very low impedance down to 0.018 Ω (at 20 °C, 100 kHz)
• Excellent ripple current capability
• AEC-Q200-qualified
• Vibration proof up to 50 g

APPLICATIONS

Automotive:
• SMPS and control units
• ABS / ESP systems
• Electric brake (EPB)
• Power management and conversion

Industrial
• Measurement and automation
• Audio / video
• Telecommunications
• SMPS and DC/DC converters
• Lightning (LED drivers)

RESOURCES

• Datasheet: 250 RMI-V - www.vishay.com/doc?28423
• For technical questions contact aluminumcaps1@vishay.com
• Material categorization: For definitions of compliance please see www.vishay.com/doc?99912
Aluminum Electrolytic Capacitors
Radial Miniature, Low Impedance, High Vibration Capability

MARKING
The capacitors are marked (where possible) with the following information:
- Rated capacitance (in μF)
- Tolerance on rated capacitance, code letter in accordance with IEC 60638 (M for ± 20 %)
- Rated voltage (in V)
- Date code, in accordance with IEC 60622
- Code indicating factory of origin
- Name of manufacturer
- Upper category temperature (105 °C)
- Negative terminal identification
- Series number (250)

ENDURANCE TEST DURATION AND USEFUL LIFE AS A FUNCTION OF CASE SIZE

<table>
<thead>
<tr>
<th>NOMINAL CASE SIZE Ø D x L (mm)</th>
<th>CASE CODE</th>
<th>ENDURANCE AT 105 °C (h)</th>
<th>USEFUL LIFE AT 105 °C (h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 x 20</td>
<td>19a</td>
<td>3000</td>
<td>7000</td>
</tr>
<tr>
<td>16 x 25</td>
<td>19</td>
<td>5000</td>
<td>10 000</td>
</tr>
<tr>
<td>16 x 31</td>
<td>20</td>
<td>5000</td>
<td>10 000</td>
</tr>
<tr>
<td>16 x 35</td>
<td>21</td>
<td>5000</td>
<td>10 000</td>
</tr>
<tr>
<td>18 x 20</td>
<td>1820</td>
<td>3000</td>
<td>7000</td>
</tr>
<tr>
<td>18 x 31</td>
<td>1831</td>
<td>6000</td>
<td>10 000</td>
</tr>
<tr>
<td>18 x 40</td>
<td>1840</td>
<td>8000</td>
<td>10 000</td>
</tr>
</tbody>
</table>

EXTENDED VIBRATION SPECIFICATIONS

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>PROCEDURE</th>
<th>REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vibration specifications</td>
<td>From 10 g to 50 g</td>
<td>No visible damage; no leakage of electrolyte; marking legible</td>
</tr>
<tr>
<td>Vibration frequency range</td>
<td>10 Hz to 2 kHz</td>
<td></td>
</tr>
<tr>
<td>Vibration profile</td>
<td>Constant sinus sweep: 3 directions: 8 h per direction</td>
<td></td>
</tr>
</tbody>
</table>