ABS06 – 32.768 kHz

**FEATURES:**
- Miniature size 2.0 x 1.2 x 0.6mm ideal for high density circuit boards
- Ceramic package offers excellent environmental & heat resistance
- Extended temperature -55°C to +125°C for industrial applications

**APPLICATIONS:**
- Wide range in communication & measuring equipment
- Commercial & Industrial applications
- Wireless communications
- PDA and Palm Pilots

**STANDARD SPECIFICATIONS:**

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Minimum</th>
<th>Typical</th>
<th>Maximum</th>
<th>Units</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>32.768</td>
<td></td>
<td></td>
<td>kHz</td>
<td></td>
</tr>
<tr>
<td>Operation Mode</td>
<td>Blank</td>
<td>Flexural Mode</td>
<td>(Tuning Fork)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-40</td>
<td>+85</td>
<td></td>
<td>°C</td>
<td></td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-55</td>
<td>+125</td>
<td></td>
<td>°C</td>
<td></td>
</tr>
<tr>
<td>Frequency Tolerance @+25°C</td>
<td>-20</td>
<td>+20</td>
<td></td>
<td>ppm</td>
<td>Tested at 0.5uW</td>
</tr>
<tr>
<td>Temperature Coefficient:</td>
<td>-0.04</td>
<td>-0.03</td>
<td>-0.02</td>
<td>ppm/T²</td>
<td></td>
</tr>
<tr>
<td>Turn-over temperature:</td>
<td>+20</td>
<td>+25</td>
<td>+30</td>
<td>°C</td>
<td></td>
</tr>
<tr>
<td>Equivalent series resistance (R1)</td>
<td>90</td>
<td></td>
<td></td>
<td>kΩ</td>
<td>For -40 ~ +85°C option</td>
</tr>
<tr>
<td></td>
<td>110</td>
<td></td>
<td></td>
<td>kΩ</td>
<td>For -40 ~ +125°C option &amp; -55 ~ +125°C option</td>
</tr>
<tr>
<td>Load capacitance (CL)</td>
<td>12.5</td>
<td></td>
<td></td>
<td>pF</td>
<td></td>
</tr>
<tr>
<td>Drive Level</td>
<td>0.1</td>
<td>0.5</td>
<td></td>
<td>μW</td>
<td>See options</td>
</tr>
<tr>
<td>Q value</td>
<td>9000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aging@25°C±3°C</td>
<td>-3</td>
<td>3</td>
<td></td>
<td>ppm</td>
<td>First year</td>
</tr>
<tr>
<td>Insulation Resistance</td>
<td>500</td>
<td></td>
<td></td>
<td>MΩ</td>
<td>@ 100Vdc ± 15V</td>
</tr>
</tbody>
</table>

**OPTIONS AND PART IDENTIFICATION:** (Left blank if standard)

- **Load Capacitance:**
  - Blank: 12.5pF
  - 9: 9pF
  - 7: 7pF
  - 6: 6pF
  - 4P: 4pF

- **Operating Temp. Range:**
  - Blank: -40 ~ +85°C
  - H: -40 ~ +125°C
  - W: -55 ~ +125°C

- **Freq. Tolerance:**
  - Blank: ±20ppm
  - 1: ±10ppm
  - 4: ±30ppm

- **Packaging:**
  - Blank: Bulk
  - T: Tape & Reel (3000pcs/reel)
32.768kHz SMD LOW PROFILE CRYSTAL

**ABS06**

**OUTLINE DRAWING:**

**TAPe & REEL:**

T=Tape and reel (3,000pcs/reel)

**REFLOW PROFILE:**

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Need a test socket for the ABS06 Series? To view compatible **PRECISION TEST & BURN-IN SOCKETS** for these parts, click here. P/N AXS-2012-02-04

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