TUNING FORK CRYSTAL UNIT (SMD ・ Plastic Package)

CM200C

RoHS compliant

3,000pcs/reel

■ FEATURES

- Frequency range : 32.768kHz
- External dimensions (mm)
  L : 8.0 x W : 3.8 x H : 2.55
- Applications
  Smart Meters / Consumer products

■ DIMENSION [mm]

Do not connect to external terminals with #2 and #3.

<table>
<thead>
<tr>
<th>Item</th>
<th>Model</th>
<th>CM200C</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Frequency</td>
<td>f₀</td>
<td>32.768kHz</td>
<td></td>
</tr>
<tr>
<td>Frequency Tolerance</td>
<td>Δf/f₀</td>
<td>±5ppm / ±10ppm / ±20ppm</td>
<td>at 25°C</td>
</tr>
<tr>
<td>Load capacitance</td>
<td>CL</td>
<td>6.0pF / 7.0pF / 9.0pF / 12.5pF</td>
<td>Please specify your requirement</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>TOPR</td>
<td>-40°C ~ +85°C</td>
<td></td>
</tr>
<tr>
<td>Storage Temperature Range</td>
<td>TSTR</td>
<td>-55°C ~ +125°C</td>
<td></td>
</tr>
<tr>
<td>Turnover Temperature</td>
<td>T_M</td>
<td>25°C±5°C</td>
<td></td>
</tr>
<tr>
<td>Temperature Coefficient</td>
<td>β</td>
<td>-0.034±0.006ppm/°C²</td>
<td></td>
</tr>
<tr>
<td>Motional (series) resistance</td>
<td>R₁</td>
<td>50KΩ Max.</td>
<td>at 25°C</td>
</tr>
<tr>
<td>Level of drive</td>
<td>D_L</td>
<td>1 μW Max.</td>
<td></td>
</tr>
<tr>
<td>Aging (first year)</td>
<td>Δf/f₀</td>
<td>±3ppm Max.</td>
<td>25°C±3°C</td>
</tr>
<tr>
<td>Shunt capacitance</td>
<td>C₀</td>
<td>1.35pF Typ.</td>
<td></td>
</tr>
</tbody>
</table>

http://cfd.citizen.co.jp/english/prod-tech/product/cvo_top.html
PART NUMBERING SYSTEM

CM200C 32768 D Z F T - □□□

- **Frequency**
  - Please specify the frequency in Hz.
- **Frequency Tolerance (at 25°C)**
  - D: ±20ppm (STD)
  - E: ±10ppm
  - H: ±5ppm
- **Frequency Tolerance over Operating Temp. Range**
- **Package specification**
  - T: Only Tape & Reel

- **Load capacitance (CL)**
  - B: 6.0pF
  - C: 9.0pF (STD)
  - F: 12.5pF (STD)
  - Y: 7.0pF

Part Marking [standard]

32Cyww

- 32C: Manufacturer's ID Code
- y: The last digit of production year
- w: Production week code

**Reflow profile**

Conforming to JIS C 0806 TB1208NEIAJ and RC-1009B TE1208N

Packing

- **Tape lead-out direction**
- Conforming to JIS C 0806 TB1208NEIAJ and RC-1009B TE1208N

- **Conforming to JIS C 0806 R12R and EIAJ RC-1009B R15**

<table>
<thead>
<tr>
<th>Q'ty/reel</th>
<th>a</th>
<th>b</th>
<th>c</th>
<th>d (φ)</th>
<th>e</th>
<th>f</th>
<th>g</th>
<th>h</th>
<th>i</th>
<th>j</th>
<th>k</th>
<th>l</th>
<th>m (φ)</th>
<th>n (φ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,000</td>
<td>16.0</td>
<td>7.5</td>
<td>8.0</td>
<td>1.6</td>
<td>8.3</td>
<td>0.3</td>
<td>2.70</td>
<td>5°</td>
<td>4.05</td>
<td>5°</td>
<td>17.5</td>
<td>330</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

W : Production week code

3,000 16.0 7.5 8.0 1.6 8.3 0.3 2.70

*Contact us for specifications available.

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