APPLICATIONS:
• Computers, Modems, Communication equipment
• Thin equipment
• Industrial wide temperature applications

FEATURES:
• Low in height (1.4 mm max.)
• Ceramic package assures high reliability
• Small size SMD, suitable for high density applications
• Superior heat-resistant glass sealing
• Wide operating temperature available

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 Range</td>
<td>8.000</td>
<td>-----</td>
<td>50.000</td>
<td>(*) MHz</td>
<td>Fundamental</td>
</tr>
<tr>
<td>Operation mode (MHz)</td>
<td>8.000</td>
<td>-----</td>
<td>39.999999</td>
<td></td>
<td>Fundamental AT-cut (Standard)</td>
</tr>
<tr>
<td></td>
<td>40.000</td>
<td>-----</td>
<td>80.000</td>
<td></td>
<td>3rd OT AT-cut (Standard)</td>
</tr>
<tr>
<td></td>
<td>40.000</td>
<td>-----</td>
<td>50.000</td>
<td></td>
<td>Fundamental AT-cut (See options)</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-10</td>
<td>-----</td>
<td>+60</td>
<td>°C</td>
<td>See options</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-40</td>
<td>-----</td>
<td>+90</td>
<td>°C</td>
<td></td>
</tr>
<tr>
<td>Frequency Tolerance @+25°C</td>
<td>-50</td>
<td>-----</td>
<td>+50</td>
<td>ppm</td>
<td>See options</td>
</tr>
<tr>
<td>Frequency Stability over the Operating Temperature (ref. to +25°C)</td>
<td>-50</td>
<td>-----</td>
<td>+50</td>
<td>ppm</td>
<td>See options</td>
</tr>
<tr>
<td>Equivalent series resistance</td>
<td>See table 1 below</td>
<td>7</td>
<td>pF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shunt capacitance (C0)</td>
<td>-----</td>
<td>-----</td>
<td>7</td>
<td>pF</td>
<td></td>
</tr>
<tr>
<td>Load capacitance (CL)</td>
<td>-----</td>
<td>18</td>
<td>-----</td>
<td>pF</td>
<td>See options</td>
</tr>
<tr>
<td>Drive Level</td>
<td>-----</td>
<td>10</td>
<td>100</td>
<td>μW</td>
<td></td>
</tr>
<tr>
<td>Aging@25°C±3°C</td>
<td>-----</td>
<td>-----</td>
<td>±5</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</td>
</tr>
</tbody>
</table>

(*) Frequency above 40MHz based on availability. Please contact ABRACON

OPTIONS AND PART IDENTIFICATION: (left blank if standard)

ABM7-□□□□MHz -□ -□ -□ -□ -□ -□ -□ -□

Frequency in MHz
e.g. 14.318MHz 14.31818MHz 26.000MHz

Load Capacitance (pF)
Please specify CL in pF or S for series (8 to 33pF)
Please contact ABRACON for other values

Custom ESR if other than standard
□□ Specify a value in Ω (e.g.: R40)

Operating Temp.
E: 0°C ~ 70°C
B: -20°C ~ 70°C
C: -30°C ~ 70°C
N: -30°C ~ 85°C
D: -40°C ~ 85°C
L(***): -40°C ~ 1105°C
K(***): -40°C ~ 125°C
L(*): -55°C to 125°C

FREQ TOLERANCE
1: ±10 ppm
7: ±15 ppm
2: ±20 ppm
3: ±25 ppm
4: ±30 ppm

FREQ STABILITY
U: ±10 ppm (***)
G: ±15 ppm (***)
X: ±20 ppm
W: ±25 ppm
Y: ±30 ppm
H: ±35 ppm
Q: ±100 ppm

(*) -10°C to 60°C only.
(**) Contact ABRACON for availability for -40°C to +85°C

PACKAGING
Blank: Bulk
T: 1k or 2pcs/reel
T2: 250pcs/reel

MODE
F: Fund AT for >40MHz

Table 1

<table>
<thead>
<tr>
<th>Frequency (MHz)</th>
<th>ESR(Ω) max.</th>
<th>Operation Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.000 - 9.999</td>
<td>100</td>
<td>Fundamental</td>
</tr>
<tr>
<td>10.000 - 15.999</td>
<td>60</td>
<td>Fundamental</td>
</tr>
<tr>
<td>16.000 - 50.000</td>
<td>50</td>
<td>Fundamental</td>
</tr>
<tr>
<td>40.000 - 80.000</td>
<td>70</td>
<td>3rd Overtone</td>
</tr>
</tbody>
</table>

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Visit www.abracon.com for Terms & Conditions of Sale Revised: 12.13.10
Note: Due to the availability of raw materials, this part may be manufactured with the chamfer on pin 1. Be advised that this does not affect the electrical characteristics of the crystal in any way.

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