AOC1409 & AOC2012 SERIES
Stratum 3/3E OCXO/VCOCXO
High-Precision Clocking + Ultra-Low Phase Noise

SMD OCXO Oscillators
Abracon’s AOC1409 & AOC2012 SMD oven-controlled SC-Cut crystal oscillator based designs exhibit extremely low long-term aging characteristics over 20 years in both fixed and voltage-controlled LVCMOS clock output configurations. Target applications include base stations, precision GPS, cellular infrastructure, test & measurement equipment, switches & routers, and time & frequency references.

AOC1409 FEATURES
- 6-pin SMD reflow-solderable package
- Superior long-term aging: ±700ppb over 20 years
- Excellent phase noise:
  - -115dBc/Hz typ. @ 10Hz offset
  - -138dBc/Hz typ. @ 100Hz offset
  - -148dBc/Hz typ. @ 1kHz offset
  - -152dBc/Hz typ. @ 1kHz offset

AOC2012 FEATURES
- 4-pin SMD reflow-solderable package
- Superior long-term aging: ±1ppm over 20 years
- Excellent phase noise:
  - -115dBc/Hz typ. @ 10Hz offset
  - -135dBc/Hz typ. @ 100Hz offset
  - -148dBc/Hz typ. @ 1kHz offset
  - -152dBc/Hz typ. @ 1kHz offset

<table>
<thead>
<tr>
<th>Series</th>
<th>Dimensions (mm)</th>
<th>Functional Options</th>
<th>Frequency Range</th>
<th>Temp Range</th>
<th>Stability Over OTR</th>
<th>Vdd Supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOC1409</td>
<td>14.9 x 9.7 x 7.0</td>
<td>Fixed Clock or Voltage Controlled</td>
<td>20MHz</td>
<td>-40°C to +85°C</td>
<td>±10ppb</td>
<td>3.3V</td>
</tr>
<tr>
<td>AOC2012</td>
<td>20.32 x 12.7 x 11.0</td>
<td>Fixed Clock or Voltage Controlled</td>
<td>10 to 25MHz</td>
<td>-20°C to +70°C</td>
<td>±10ppb</td>
<td>3.3V</td>
</tr>
</tbody>
</table>