**AXIOM25**

**OCXO IN DIL14 PACKAGE, SINE WAVE OUTPUT**

**FEATURES**
- DIL14 holder size 20.7 x 13.1 x 8.5 mm.
- Sine wave output
- Till +/-50 ppb stability over temperature range
- Standard Frequencies 10 / 12.8 / 16.384 / 20.0 MHz

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**Parameter** | **min.** | **typ.** | **max.** | **Unit** | **Condition**
--- | --- | --- | --- | --- | ---
**Frequency range** | 10 | 80 | MHz | | |
**Standard frequencies** | 10 / 12.8 / 16.384 / 20.000 | MHz | | | |
**Frequency stability** | ppm | | | | |
- Initial tolerance ± 500 ppm @+25°C, Vc = 2.5V
- vs. operating temperature range (steady state) ± 50 ppm Option I = “50”
- ± 100 ppm Option II = “100”
- ± 200 ppm Option II = “200”
- ± 300 ppm Option II = “300”
- ± 500 ppm Option II = “500”
- operating temperature range -10 to +60 °C
- vs. supply voltage variation ± 10 ppm @+40°C, after 30 days
- vs. load change ± 20 ppm
- long term (aging) 1st year (Note 3) ± 0.5 ppm @ +40°C, after 30 days
**Frequency adjustment range**
- Electronic Frequency Control (EFC) ± 2 ppm
- EFC voltage $V_c$ 0.15 to 1.65 V
- 0.25 to 4.75 V
- Option I = “33”
- Option II = “50” or “12”
- EFC slope (Δf / ΔVc) positive
- EFC linearity %
- EFC input impedance 100 kΩ
**RF output**
- Signal waveform Sine wave
- Load 50 Ω
- Output amplitude +3 dBm
- Harmonic attenuation 20 dBC
- Warm-up time 2 min
- $\Delta f_{final/f0} < ±0.1$ ppm
- Supply voltage $V_i$
  - 3.13 V
  - 4.75 V
  - 11.4 V
- Option I = “33”
- Option I = “50”
- Option I = “12”
**Current consumption** (steady state) @ +25°C
- 300 mA
- 200 mA
- 90 mA
- Option I = “33”
- Option I = “50”
- Option I = “12”
**Current consumption** (warm-up)
- 800 mA
- 500 mA
- 200 mA
- Option I = “33”
- Option I = “50”
- Option I = “12”
**Operable temperature range**
- -30 °C
- +75 °C
**Storage temperature range**
- -40 °C
- +85 °C
**Enclosure** (see drawing)
- 20.7 x 13.1 x 8.5 mm
**Weight**
- 5 gram
**Packing**
- Palette or tube
**ESD Sensitivity**
- 1500 V
- HBM, IEC 61000-4-2
AXIOM25 OCXO IN DIL14 PACKAGE, SINE WAVE OUTPUT

Notes:
1. Terminology and test conditions are according to IEC standard IEC60679-1, unless otherwise stated.
2. Other operating temperature range on request.
3. Aging of ± 0.2 ppm / 1st year on request.

Ordering Code:

<table>
<thead>
<tr>
<th>Model (Specification)</th>
<th>Option I</th>
<th>Option II</th>
<th>Frequency [MHz]</th>
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<tbody>
<tr>
<td>AXIOM25</td>
<td>50</td>
<td>100</td>
<td>10.000</td>
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Enclosure drawing

Pin connections

<table>
<thead>
<tr>
<th>Pin #</th>
<th>Symbol</th>
<th>Function</th>
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<tbody>
<tr>
<td>1</td>
<td>Vc</td>
<td>Voltage Control (EFC)</td>
</tr>
<tr>
<td>7</td>
<td>GND</td>
<td>Ground</td>
</tr>
<tr>
<td>8</td>
<td>RF OUT</td>
<td>RF Output</td>
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<tr>
<td>14</td>
<td>Vs</td>
<td>Supply Voltage</td>
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Environmental conditions

<table>
<thead>
<tr>
<th>Test</th>
<th>IEC 60068 Part ...</th>
<th>IEC 60679-1 clause ...</th>
<th>Test conditions</th>
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</thead>
<tbody>
<tr>
<td>Sealing tests (if applicable)</td>
<td>2-17</td>
<td>4.6.2</td>
<td>Gross leak: Test Qc, Fine leak: Test Qk</td>
</tr>
<tr>
<td>Solderability</td>
<td>2-20</td>
<td>4.6.3</td>
<td>Test Ta (235 ± 5°C) Method 1, Test Tb Method 1A, 5s</td>
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<tr>
<td>Resistance to soldering heat</td>
<td>2-58</td>
<td></td>
<td></td>
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<tr>
<td>Shock*</td>
<td>2-27</td>
<td>4.6.8</td>
<td>Test Ea, 3 x per axes 100g, 6 ms half-sine pulse</td>
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<tr>
<td>Vibration, sinusoidal*</td>
<td>2-6</td>
<td>4.6.7</td>
<td>Test Fc, 30 min per axes, 10 Hz - 55 Hz 0,75mm; 55 Hz - 2 kHz, 10g</td>
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<td>Endurance tests</td>
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<tr>
<td>- ageing</td>
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<td>- extended aging</td>
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<td>4.7.1, 4.7.2 30 days @ 85°C, OCXO @25°C, 1000h, 2000h, 8000h @85°C</td>
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Other environmental conditions on request

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