FEATURES
- SMA Connectorized package, size 54 x 40.5 x 19 mm.
- Sine Wave Output +3 dBm (R 50Ω)
- 3 different Supply Voltage options: 3.3V / 5.0V / 12.0V
- Standard Frequencies: 10.0 / 12.8 / 20.0 MHz

<table>
<thead>
<tr>
<th>Parameter</th>
<th>min.</th>
<th>typ.</th>
<th>max.</th>
<th>Unit</th>
<th>Condition</th>
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<td>40</td>
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<td>Standard frequencies</td>
<td>10.000 / 12.800 / 20.000</td>
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<td>Frequency stability</td>
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<td>vs. operating temperature range (steady state)</td>
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<td>ppb</td>
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<td>ppb</td>
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<td>ºC</td>
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<tr>
<td>vs. supply voltage variation</td>
<td>± 10</td>
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<tr>
<td>vs. load change</td>
<td>± 10</td>
<td>ppb</td>
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<td>Long term (aging) per day, after 30 days operation</td>
<td>± 10</td>
<td>ppb</td>
<td></td>
<td>ppm</td>
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<tr>
<td>Long term (aging) 1° year, after 30 days operation</td>
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<td>± 100</td>
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<td>Option II = “50”, “25”</td>
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<td>Option II = “50”, “25”</td>
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<td>V</td>
<td>Option I = “33”</td>
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<td>0.25</td>
<td>4.75</td>
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<td>V</td>
<td>Option I = “50” or “12”</td>
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<td>EFC slope (DF / DVc)</td>
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<td>EFC input impedance</td>
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<td>RF output</td>
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<td>Signal waveform</td>
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<tr>
<td>Load</td>
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<td>Ω</td>
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<td>Output level</td>
<td>+3</td>
<td>dBm</td>
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<td>Harmonics attenuation</td>
<td>30</td>
<td>dBc</td>
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<td>Non-harmonics</td>
<td>50</td>
<td>dBc</td>
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<td>Warm-up time</td>
<td>3.15</td>
<td>3.3</td>
<td>3.45</td>
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<td>Supply voltage Vs</td>
<td>4.75</td>
<td>5.0</td>
<td>5.25</td>
<td>V</td>
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<td>12</td>
<td>12.6</td>
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<td>@ +25°C</td>
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<td>Option I = “33”</td>
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<td></td>
<td>300</td>
<td>mA</td>
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<td>Option I = “50”</td>
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<tr>
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<td>150</td>
<td>mA</td>
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<td>Option I = “12”</td>
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<tr>
<td>Current consumption (warm-up)</td>
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<tr>
<td></td>
<td>1000</td>
<td>mA</td>
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<td>Option I = “33”</td>
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<tr>
<td></td>
<td>800</td>
<td>mA</td>
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<td>Option I = “50”</td>
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<td>400</td>
<td>mA</td>
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<td>Option I = “12”</td>
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<tr>
<td>Operable temperature range</td>
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<td>+75</td>
<td></td>
<td>°C</td>
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<tr>
<td>Storage temperature range</td>
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<td>+85</td>
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<td>°C</td>
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<tr>
<td>Enclosure (see drawing) (L x W x H)</td>
<td>54 x 40.5 x 19 max.</td>
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<td>h = 2.0</td>
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<td>Weight</td>
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<td>gram</td>
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<td>Packing</td>
<td>Palette</td>
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Notes:
1. Terminology and test conditions are according to IEC standard IEC60679-1, unless otherwise stated

FCD-Tech B.V.
Stationsplein 99/259
1703 WE Heerhugowaard
Netherlands

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### Connectorized Package OCXO

**Datasheet**

**AXIOM90**  
**OCXO WITH SMA CONNECTOR, SINE WAVE OUTPUT**

**Ordering Code:**

<table>
<thead>
<tr>
<th>Model (Specification)</th>
<th>Option I</th>
<th>Option II</th>
<th>Frequency [MHz]</th>
</tr>
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<tbody>
<tr>
<td>AXIOM90</td>
<td>50</td>
<td>100</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>Control Voltage (EFC)</td>
</tr>
<tr>
<td>2</td>
<td>GND</td>
<td>Ground</td>
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<tr>
<td>3</td>
<td>VS</td>
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<td>SMA</td>
<td>RF OUT</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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<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>
</tr>
<tr>
<td>Resistance to soldering heat</td>
<td>2-58</td>
<td></td>
<td>Test Ea, 3 x per axes 100g, 6 ms half-sine pulse</td>
</tr>
<tr>
<td>Shock*</td>
<td>2-27</td>
<td>4.6.8</td>
<td>Test Fc, 30 min per axes, 10 Hz - 55 Hz 0,75mm; 55 Hz - 2 kHz, 10g</td>
</tr>
<tr>
<td>Vibration, sinusoidal*</td>
<td>2-6</td>
<td>4.6.7</td>
<td>30 days @ 85°C, OCXO @25°C, 1000h, 2000h, 8000h @85°C</td>
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<td>Endurance tests</td>
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