Model CVCSO-914SXT is a voltage-controlled SAW (surface acoustic wave) Clock Oscillator (VCSO). SAW crystal technology provides low-noise and low-jitter performance with true sinewave output. Features include -133 dBC/Hz phase noise at 10 kHz offset at 1.6 GHz, 5V input voltage, -20°C to +70°C operating temperature, and 9×14 mm SMT package. The oscillator’s second harmonic is typically -20 dBC.

Applications include PLL frequency translation, test and measurement, avionics, point-to-point radios, and multi-point radios.
CVCSO-914SXT Model
9×14 mm SMD, 5.0V, SineWave

| Frequency Range: | 1244.160 MHz to 2000 MHz |
| Temperature Range: | -20°C to +70°C (standard) |
| (Option E): | 0°C to 85°C |
| (Option X): | -40°C to 85°C |
| Storage: | -40°C to 90°C |
| Input Voltage: | 5.0V ±0.25V |
| Control Voltage Range: | 0V to 5.0V |
| Tuning Sensitivity (Kv): | +120 ppm/V Typical |
| Settability At Nominal (25°C): | ±200ppm Typical |
| Frequency vs Temperature: | ±200ppm Typical |
| Input Current: | 60mA Typical, 70mA Max |

Output:
- Pullability APR: ±50ppm Min
- Linearity: ±20% Max
- Output Power: +8dBm Min into 50 Ω Load
- Start-Up Time: 2ms Typical, 10ms Max
- 2nd Harmonic: [-20dBc Typical]
- (Nominal Frequency)/2: -15dBc Max
- Modulation BW: >20kHz @ -3dB
- G-sensitivity: 0.9×10⁻⁹ per G
- Weight: 0.816 g

SUGGESTED PAD LAYOUT

<table>
<thead>
<tr>
<th>Pad</th>
<th>Connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Volt. Control</td>
</tr>
<tr>
<td>2</td>
<td>GND</td>
</tr>
<tr>
<td>3</td>
<td>Output</td>
</tr>
<tr>
<td>4</td>
<td>Vdd</td>
</tr>
</tbody>
</table>

PAD FINISH: Immersion Gold (ENIG); 5 micro inches maximum

Package Height Options (Max)

<table>
<thead>
<tr>
<th>inches</th>
<th>mm</th>
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</thead>
<tbody>
<tr>
<td>Standard</td>
<td>0.210</td>
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<tr>
<td>Option L</td>
<td>0.135</td>
</tr>
</tbody>
</table>

Table A

See Table A

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Available Frequencies (MHz):
1244.160
1500
1600
2000

Custom Frequencies Available with NRE Fee

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanical Vibration</td>
<td>MIL-STD-883, Method 2007, Condition A</td>
</tr>
<tr>
<td>Solderability</td>
<td>MIL-STD-883, Method 2003</td>
</tr>
<tr>
<td>Solvent Resistance</td>
<td>MIL-STD-202, Method 215</td>
</tr>
<tr>
<td>Resistance to Soldering Heat</td>
<td>MIL-STD-202, Method 210, Condition I or J</td>
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<tr>
<td>Thermal Shock</td>
<td>MIL-STD-883, Method 1011, Condition A</td>
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<tr>
<td>Moisture Resistance</td>
<td>MIL-STD-883, Method 1004</td>
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</tbody>
</table>

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