CVSS-945 Model
9×14 mm SMD, 5.0V, SineWave

Frequency Range: 10 MHz to 125 MHz
Temperature Range: 0°C to 70°C
(Option X)
-40°C to 85°C
Storage: -45°C to 90°C
Input Voltage: 5.0V ± 0.5V
Control Voltage: 2.5V ± 2.5V
Settability At Nominal: 2.5V ± 0.5V
Tuning Sensitivity (Kv): +25 ppm/V Typical (Positive Slope)
Input Current: 35mA Max
Output: True SineWave
Pullability APR: ±20ppm Min
Linearity: ±10% Max
Output Power: +5 dBm Min, +7 dBm Typical
Start-up time: 2ms Typical, 5ms Max
Load: 50 Ω
2nd Harmonic: -25 dBc Typical
Sub-harmonics: None
Modulation BW: >10kHz @ -3dB
Phase Noise Typical: 10Hz -85 dBc/Hz
(@100MHz) 100Hz -120 dBc/Hz
1kHz -145 dBc/Hz
10kHz -168 dBc/Hz
100kHz -175 dBc/Hz
1MHz -175 dBc/Hz
Aging: <3ppm 1st year, <1ppm every year thereafter

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Rating</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Supply Voltage</td>
<td>+6.0</td>
<td>V</td>
</tr>
<tr>
<td>Input Control Voltage</td>
<td>+10.0</td>
<td>V</td>
</tr>
</tbody>
</table>

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50 MHz

Signal Frequency: 100.000644 MHz
Signal Level: 6.50 dBm
RBW: 10%
ATT: 0 dB
XO/RR Factor: 5U
Meas. Time: ~20 s

CVSS-945-100.000

2 Integrated Measurements

<table>
<thead>
<tr>
<th>Range</th>
<th>Trace</th>
<th>Start Offset</th>
<th>Stop Offset</th>
<th>Weighting</th>
<th>Int Noise</th>
<th>PM</th>
<th>FM / AM</th>
<th>Litter</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>12.000 kHz</td>
<td>20.000 MHz</td>
<td></td>
<td>-101.83 dBc</td>
<td>655.58 µV/11.46 μrad</td>
<td>136.553 Hz</td>
<td>18.236 fs</td>
</tr>
</tbody>
</table>

Date: 16-Dec-2020
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Ultra-Low Phase Noise
SineWave VCXO

CVSS-945 Model
9×14 mm SMD, 5.0V, SineWave

Crystek Part Number Guide

CVSS-945 X L - 125.000

#1  #2  #3  #4  #5

#1 Crystek 9×14 SMD SineWave VCXO
#2 Model 945 = Ultra Low Noise 5.0V
#3 Temp. Range: Blank = 0/70°C, X = -40/85°C
#4 Height: Blank = 0.210", L = 0.135"
#5 Frequency in MHz: 3 or 6 decimal places

Example: CVSS-945X-125.000 = 5.0V, -40/85°C, 125.000 MHz

Package Height Options (Max)

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

* Option L available for certain frequencies below 54 MHz. Consult with factory.

Table A

Standard Frequencies MHz

10.000
50.000
80.000
100.000
122.880
125.000

Mechanical:
Vibration: MIL-STD-883, Method 2007, Condition A
Resistance to Soldering Heat: MIL-STD-202, Method 210, Condition I or J

Environmental:
Thermal Shock: MIL-STD-883, Method 1011, Condition A
Moisture Resistance: MIL-STD-883, Method 1004

Packaging:
Tape/Reel: 100ea, 250ea, 500ea 24mm Tape

SUGGESTED PAD LAYOUT

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

RECOMMENDED REFLOW SOLDERING PROFILE
900034 (See App Note listed on website)