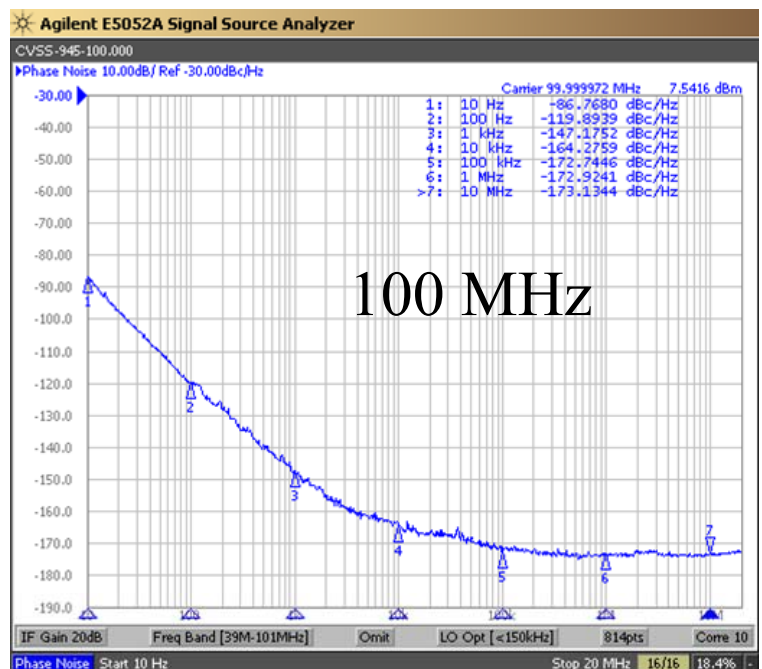
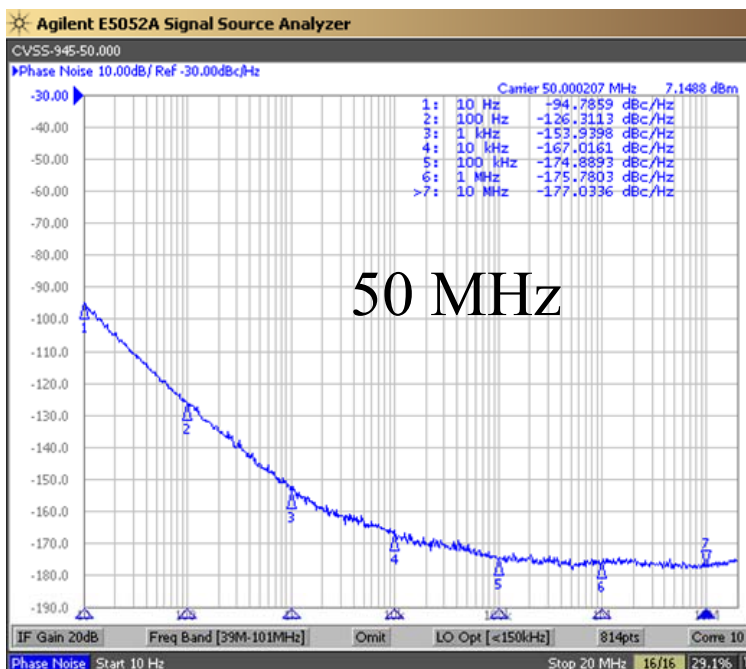
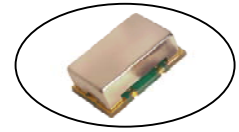


## CVSS-945 Model 9×14 mm SMD, 5.0V, SineWave

|                                 |   |
|---------------------------------|---|
| <b>Frequency Range:</b>         | 10 MHz to 125 MHz                                       |
| <b>Temperature Range:</b>       | 0°C to 70°C   |
| (Option X)                      | -40°C to 85°C   |
| <b>Storage:</b>                 | -45°C to 90°C   |
| <b>Input Voltage:</b>           | 5.0V ± 0.5V   |
| <b>Control Voltage:</b>         | 2.5V ± 2.5V   |
| <b>Settability At Nominal:</b>  | 2.5V ± 0.5V   |
| <b>Tuning Sensitivity (Kv):</b> | +25 ppm/V Typical                                       |
| <b>Input Current:</b>           | 30mA Max  |
| <b>Output:</b>                  | 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  |
| <b>2nd Harmonic:</b>            | -25 dBc Max   |
| <b>Sub-harmonics:</b>           | None  |
| <b>Modulation BW:</b>           | >10kHz @ -3dB   |
| <b>Phase Noise Typical:</b>     | 10Hz -85 dBc/Hz   |
| (@100MHz)                       | 100Hz -120 dBc/Hz                                       |
|                                 | 1kHz -145 dBc/Hz  |
|                                 | 10kHz -162 dBc/Hz                                       |
|                                 | 100kHz -170 dBc/Hz                                      |
|                                 | 1MHz -170 dBc/Hz  |
| <b>Aging:</b>                   | <3ppm 1 <sup>st</sup> year, <1ppm every year thereafter |



# Ultra-Low Phase Noise SineWave VCXO

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

## Crystek Part Number Guide

**CVSS-945 X-125.000**

#1 #2 #3 #4

#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 Frequency in MHz: 3 or 6 decimal places

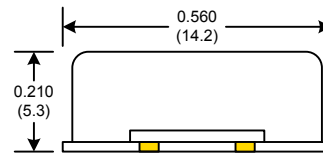
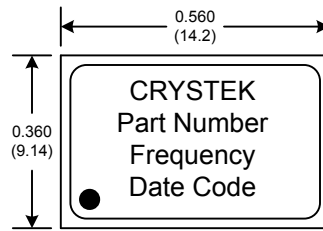
Example:  
CVSS-945X-125.000 = 5.0V, -40/85°C, 125.000 MHz

### Standard Frequencies MHz

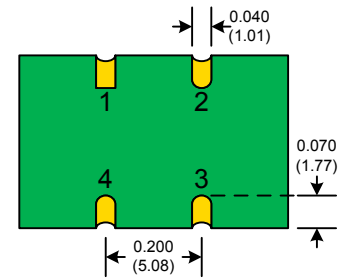
10.000  
50.000  
80.000  
100.000  
122.880  
125.000

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

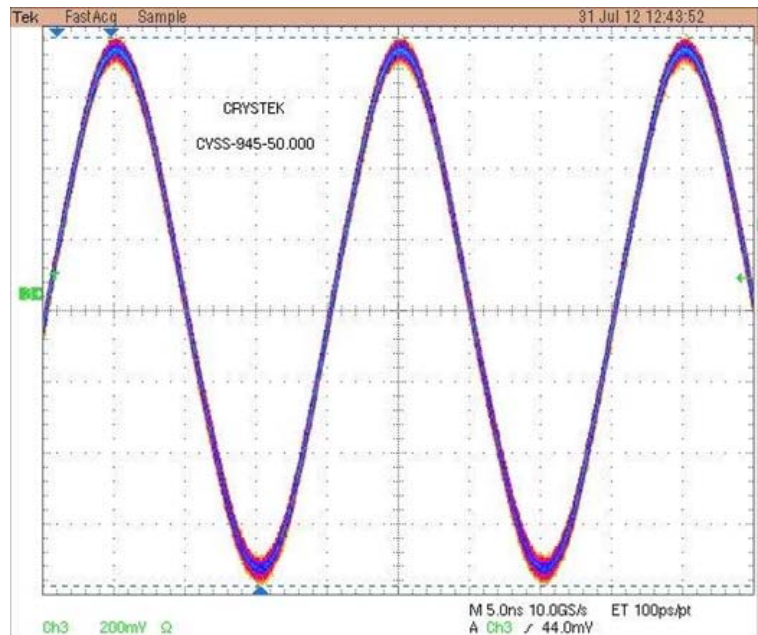
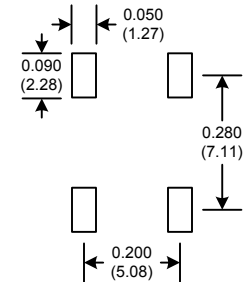
<http://www.crystek.com/specification/reflow/900034.pdf>



| Pad | Connection |
|-----|------------|
| 1   | Volt Cont. |
| 2   | GND        |
| 3   | OUT        |
| 4   | Vdd        |



### SUGGESTED PAD LAYOUT



### Mechanical:

Shock: MIL-STD-883, Method 2002, Condition B  
Solderability: MIL-STD-883, Method 2003  
Vibration: MIL-STD-883, Method 2007, Condition A  
Solvent Resistance: MIL-STD-202, Method 215  
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

CVSS-945 Rev. G

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