Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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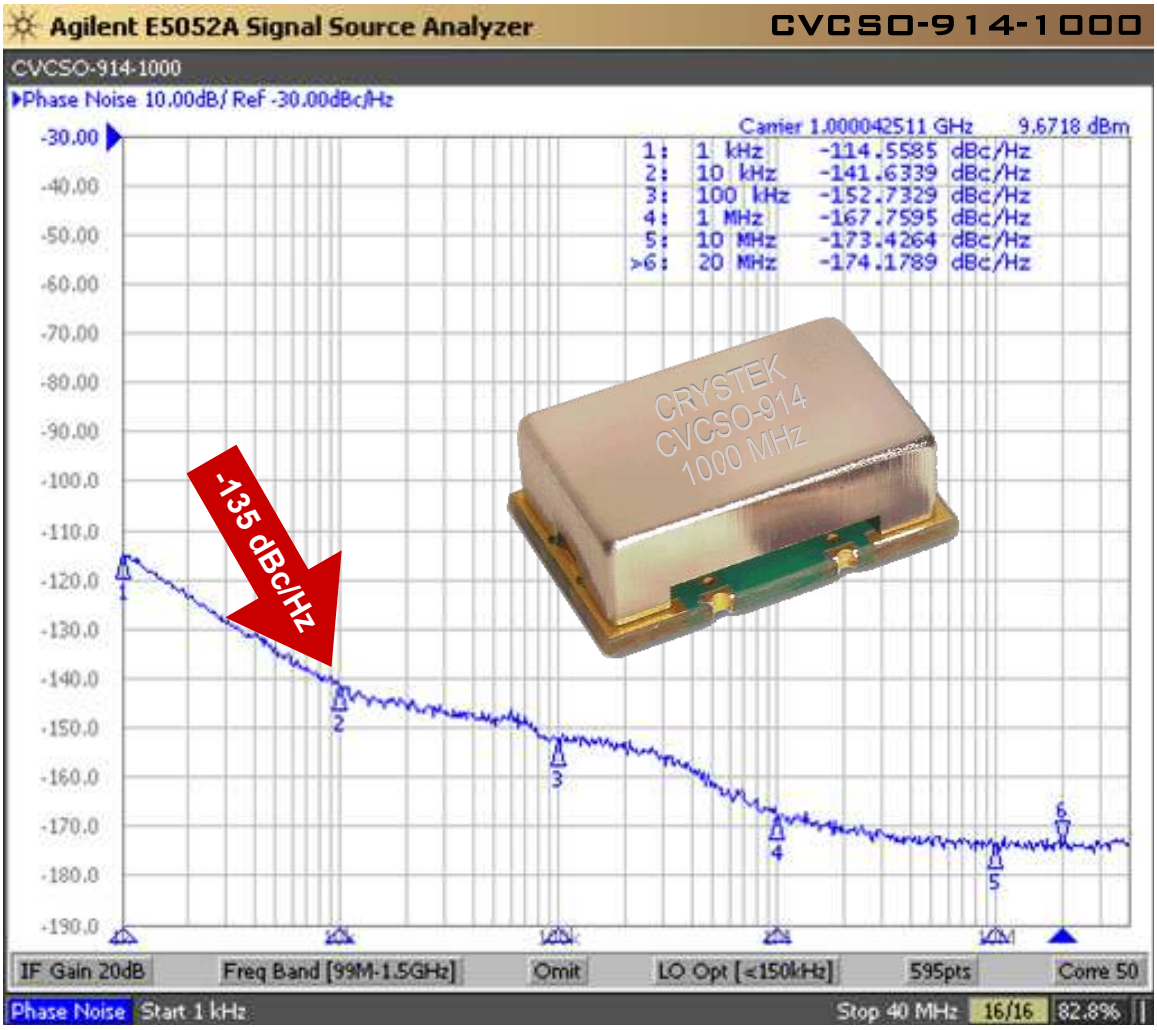
CRYSTEK CRYSTALS
A DIVISION OF CRYSTEK CORPORATION

CVCSO-914-1000

True SineWave
SAW Based VCSO
9×14mm SMD
5 Volt

RoHS Compliant

Ultra-Low Phase Noise 1GHz SAW VCSO



Model CVCSO-914-1000 is a 1 GHz 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 -135 dBc/Hz phase noise at 10 kHz offset, 5V input voltage, -20°C to +70°C operating temperature, and 9×14 mm SMT package. The oscillator has no sub-harmonic and the second harmonic is typically -20 dBc.

Applications include PLL frequency translation, test and measurement, avionics, point-to-point radios, and multi-point radios.

Rev: K
Date: 21-Mar-2013
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CVCSO-914-1000

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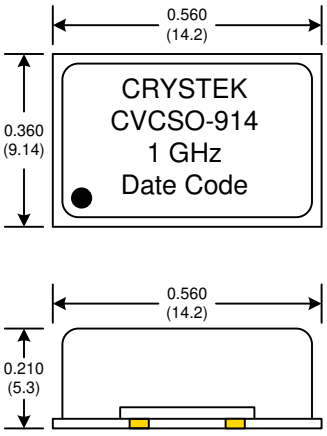
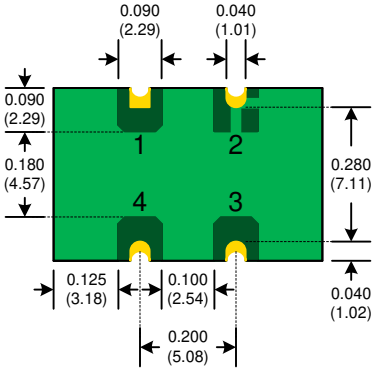
SAW Based VCSO
9×14mm SMD
5 Volt

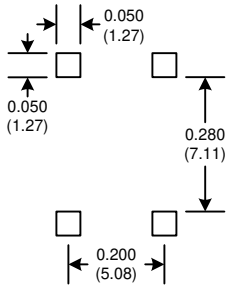
RoHS Compliant

Frequency:	**1 GHz**
Temperature Range:	**-20°C to +70°C**
Storage:	**-40°C to 90°C**
Input Voltage:	**5.0V ±0.25V**
Control Voltage:	**2.5V ±2.5V**
Settability At Nominal (25°C):	**1.5V ±0.5V**
Tuning Sensitivity (Kv):	**+120ppm/V**
Frequency vs Temperature:	**±100ppm Typical**
Input Current:	**25mA Typical, 35mA Max**
Output:	**True SineWave**
Pullability APR:	**±50ppm Min**
Linearity:	**±20% Max**
Output Power:	**+10dBm Min into 50 Ω Load**
Start-Up Time:	**2mSec Typical, 10mSec Max**
2nd Harmonic:	**-20dBc Typical, -15dBc Max**
Sub-Harmonics:	**None**
Modulation BW:	**>20kHz @ -3dB**
Phase Jitter: 12kHz~80MHz	**<1ps RMS (1-sigma) Max**
G-sensitivity:	**0.9×10^{-9} per g**





SUGGESTED PAD LAYOUT



Pad	Connection
1	Volt. Control
2	GND
3	Output
4	Vdd

CRYSTEK CORPORATION
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Phone: 239-561-3311 • 800-237-3061
Fax: 239-561-1025 • www.crystek.com

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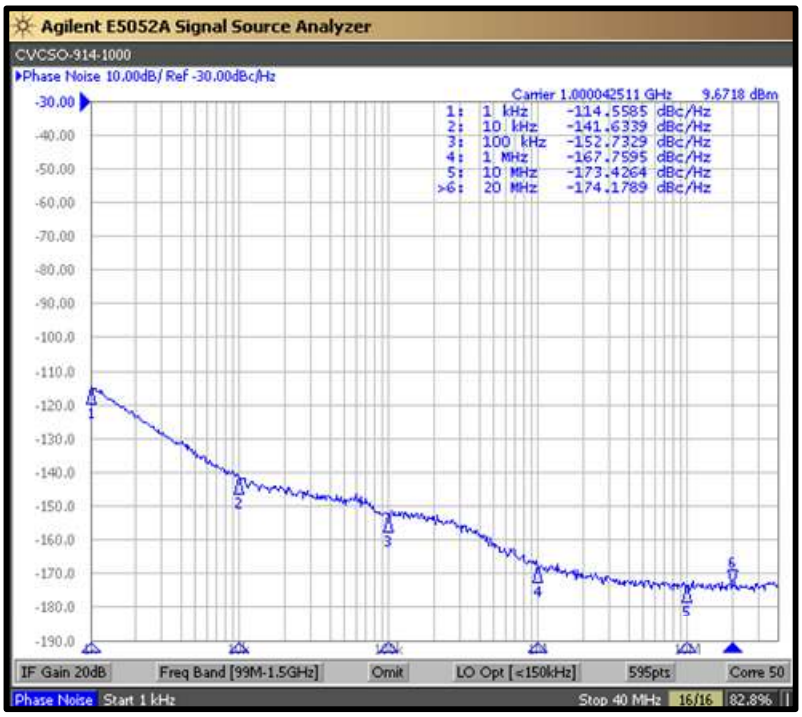

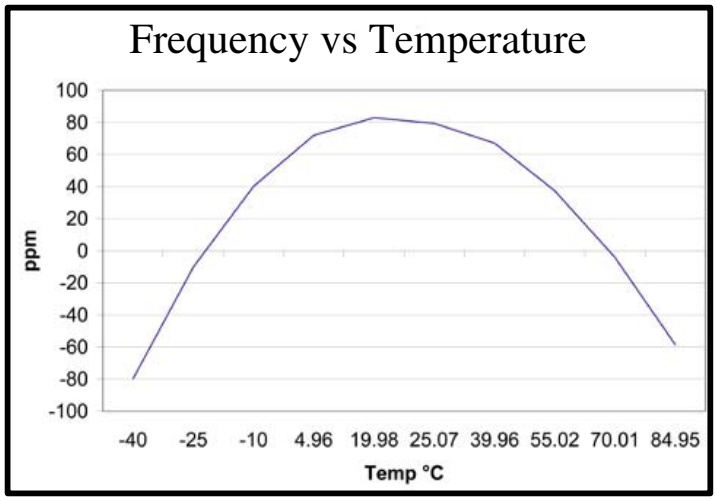

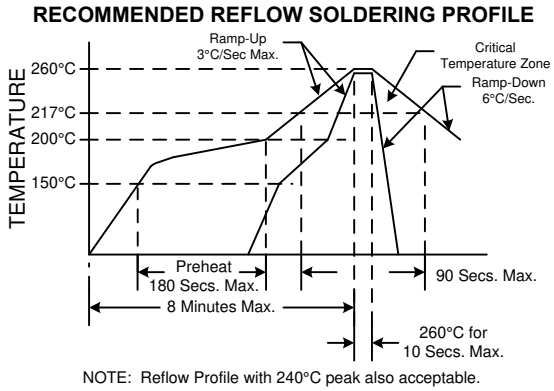

NOTE: Reflow Profile with 240°C peak also acceptable.

Parameter	Conditions
Mechanical Shock	MIL-STD-883, Method 2002, Condition B
Mechanical Vibration	MIL-STD-883, Method 2007, Condition A
Solderability	MIL-STD-883, Method 2003
Solvent Resistance	MIL-STD-202, Method 215
Resistance to Soldering Heat	MIL-STD-202, Method 210, Condition I or J
Thermal Shock	MIL-STD-883, Method 1011, Condition A
Moisture Resistance	MIL-STD-883, Method 1004

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