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!

Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

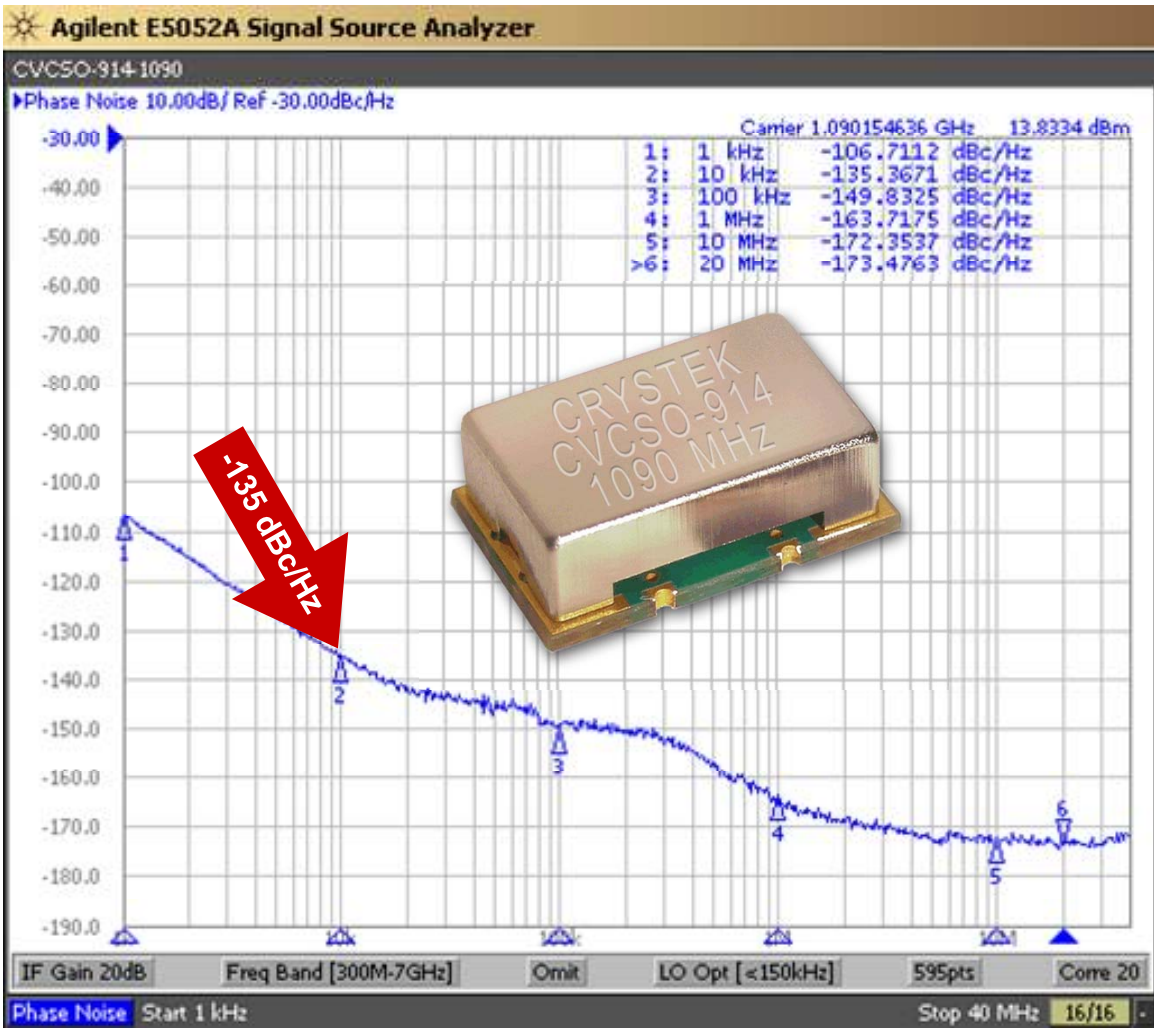
CRYSTEK CRYSTALS
A DIVISION OF CRYSTEK CORPORATION

CVCSO-914

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

RoHS Compliant

Ultra-Low Phase Noise SAW VCSO



Model CVCSO-914 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 -135 dBc/Hz phase noise at 10 kHz offset at 1 GHz, 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.

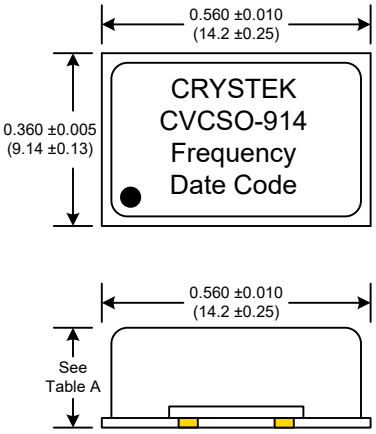
CRYSTEK CORPORATION
12730 Commonwealth Drive • Fort Myers, Florida 33913
Phone: 239-561-3311 • 800-237-3061
Fax: 239-561-1025 • www.crystek.com

CVCSO-914

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

RoHS Compliant

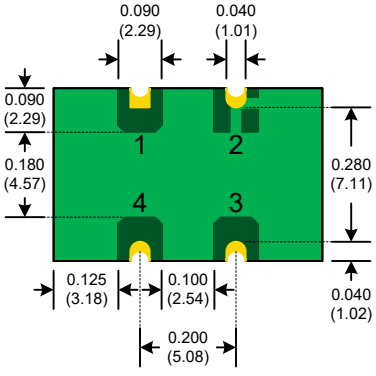
Frequency Range:	**245.760 MHz to 1090 MHz**
Temperature Range:	**0°C to +70°C**
CVCSO-914M option	**-20°C to +70°C**
CVCSO-914X option	**-40°C to +85°C**
Storage:	**-40°C to 90°C**
Input Voltage:	**5.0V ±0.25V**
Control Voltage Range:	**0V to 5.0V**
Tuning Sensitivity (Kv):	**+120 ppm/V Typical**
Settability At Nominal (25°C):	**1.5V +0.5V -1.0V**
Frequency vs Temperature:	**±200ppm 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**
G-sensitivity:	**0.9×10^{-9} per G**
Weight:	**0.816 g**



Package Height Options

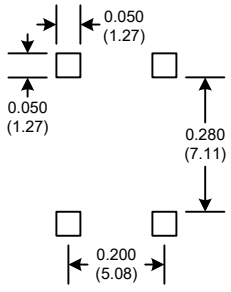
	inches	mm
Standard	0.210	5.33
Option L	0.135	3.43

Table A



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

SUGGESTED PAD LAYOUT



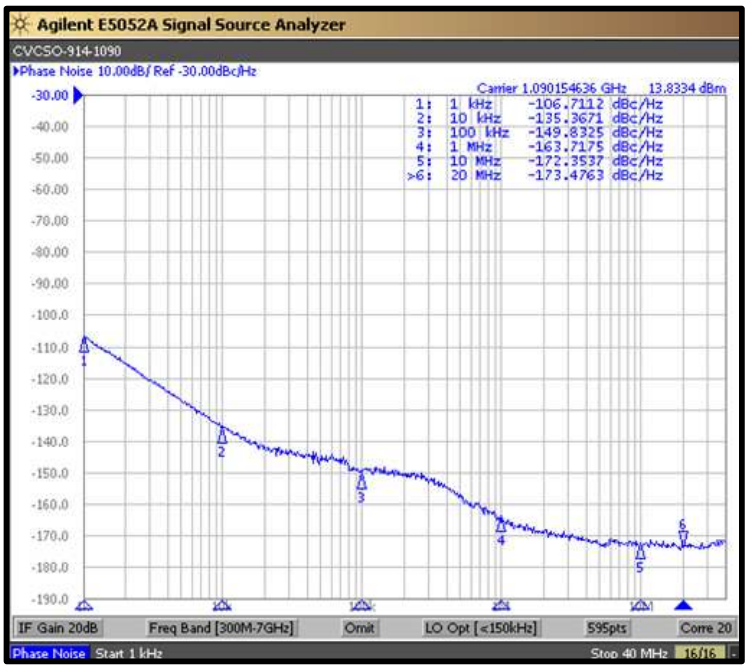
Rev: P
Date: 18-Jan-2017
Page 2 of 4

Specifications subject to change without notice.

CRYSTEK CORPORATION
12730 Commonwealth Drive • Fort Myers, Florida 33913
Phone: 239-561-3311 • 800-237-3061
Fax: 239-561-1025 • www.crystek.com

CVCSO-914
True SineWave
SAW Based VCSO
9×14mm SMD
5 Volt

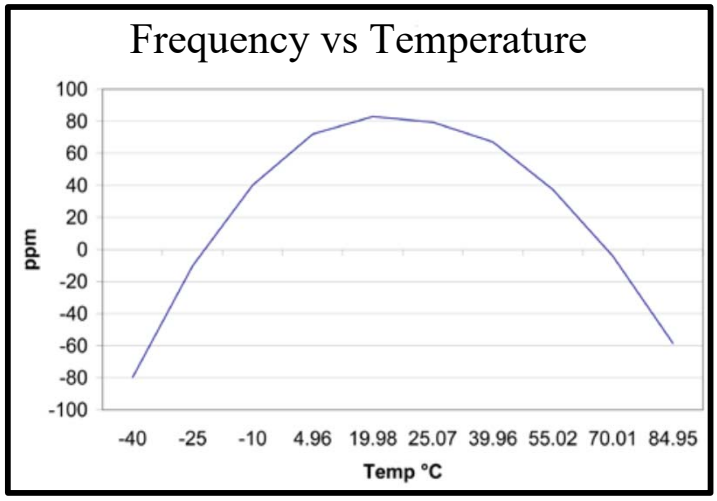
RoHS Compliant



Available Frequencies (MHz):

245.760	840.000
250.000	916.000
640.000	1000.000
800.000	1090.000

Custom Frequencies Available with NRE Fee

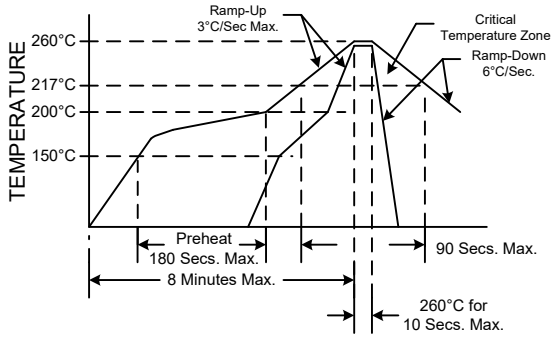


Crystek Part Number Guide

CVCSO - 914 X L - 640.000
#1 #2 #3 #4 #5

#1 Crystek Saw Voltage Controlled Oscillator
#2 Model 914
#3 Temperature Range (X = -40/85°C) (M = -20/70°C)
(Blank = 0/70°C)
#4 Height (L = 0.135") (Blank = 0.210")
#5 Frequency in MHz: 3 or 6 decimal places

RECOMMENDED REFLOW SOLDERING PROFILE



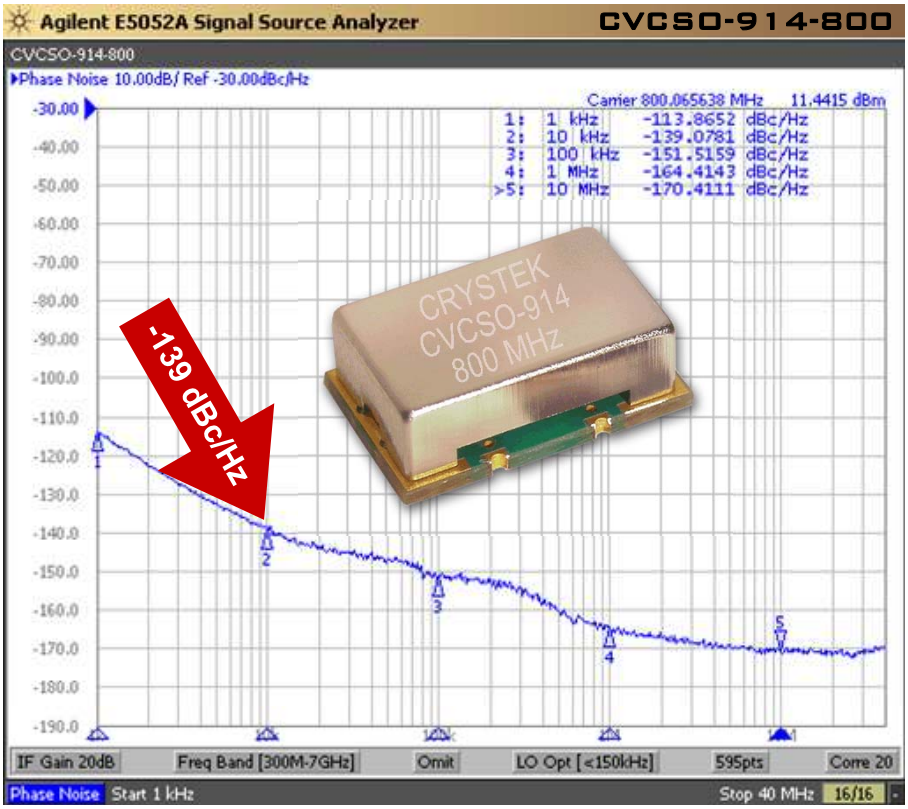
NOTE: Reflow Profile with 240°C peak also acceptable.

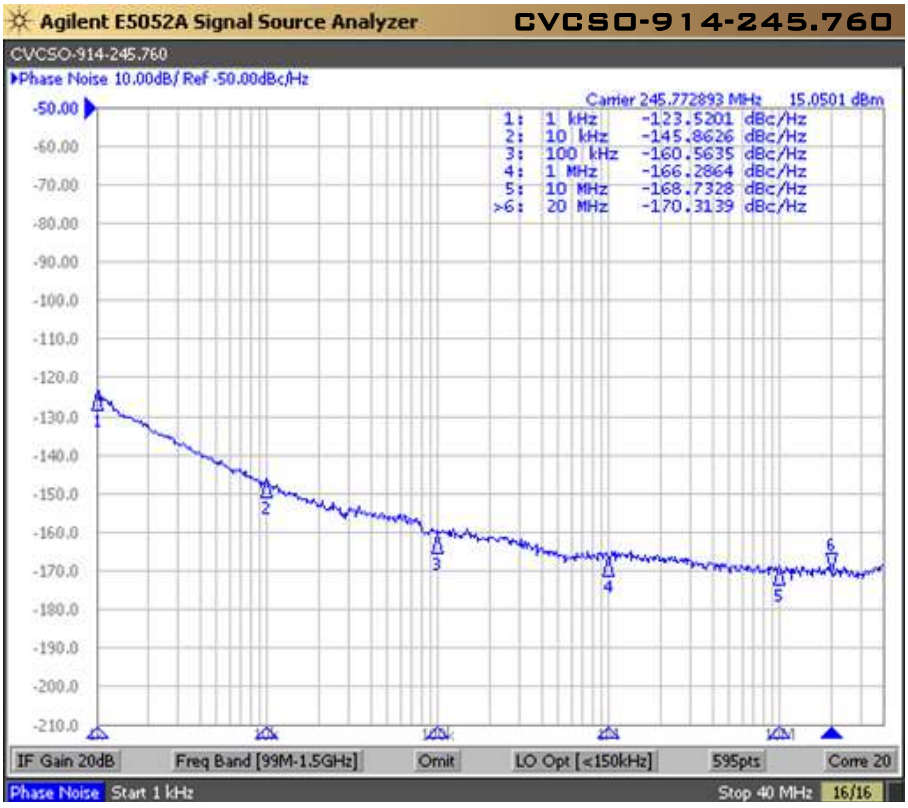
Parameter	Conditions
Mechanical Shock	MIL-STD-883, Method 2002, Condition B
Mechanical Vibration	MIL-STD-883, Method 2007, Condition A
Solderability	MIL-STD-883, Method 2003
Solvent Resistance	MIL-STD-202, Method 215
Resistance to Soldering Heat	MIL-STD-202, Method 210, Condition I or J
Thermal Shock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

Rev: P
Date: 18-Jan-2017

CRYSTEK CORPORATION
12730 Commonwealth Drive • Fort Myers, Florida 33913
Phone: 239-561-3311 • 800-237-3061
Fax: 239-561-1025 • www.crystek.com

CVCSO-914
True SineWave
SAW Based VCSO
9×14mm SMD
5 Volt





Rev:	P
Date:	18-Jan-2017
Page	4 of 4