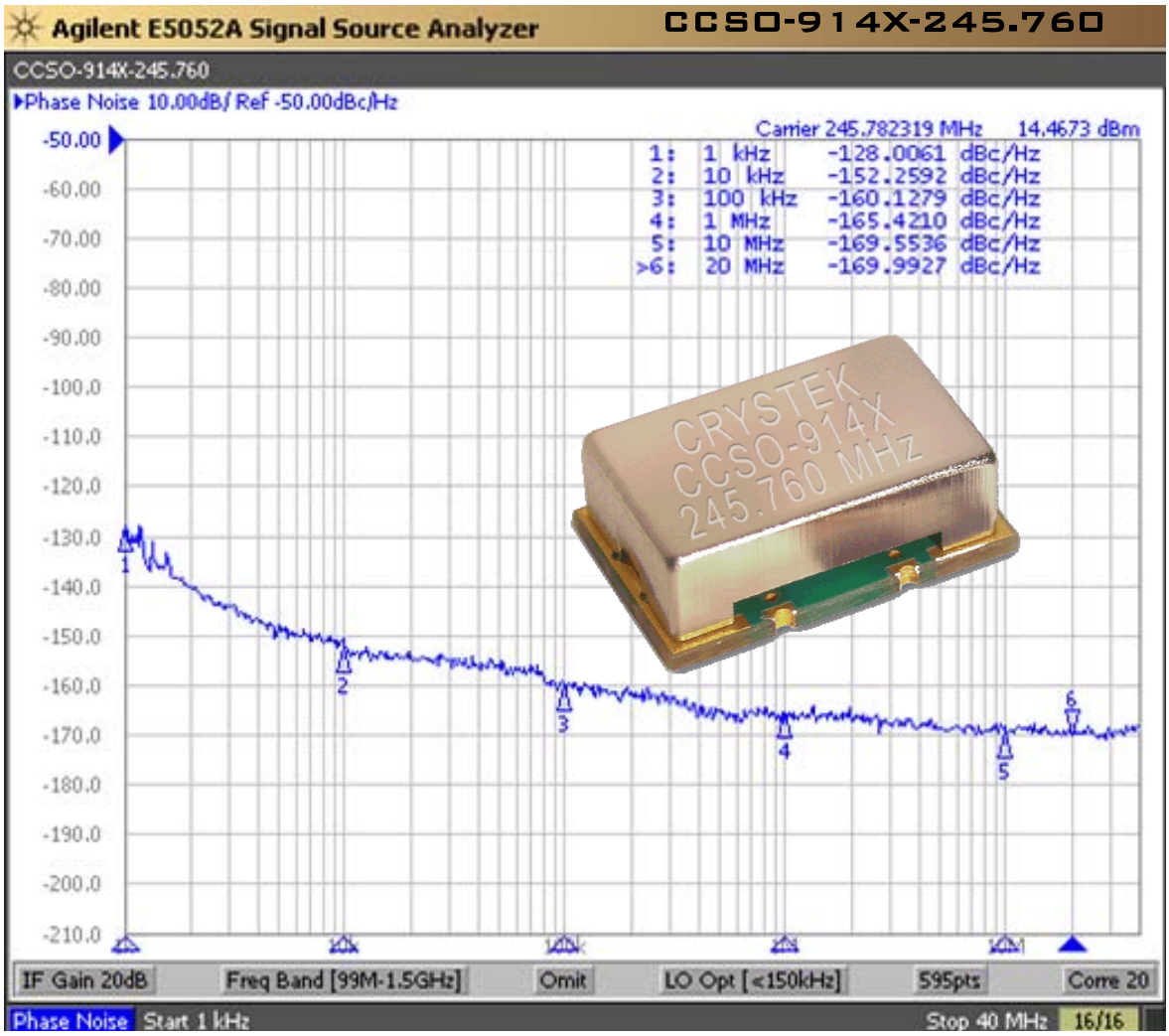
CRYSTEK CRYSTALS
A DIVISION OF CRYSTEK CORPORATION

RoHS Compliant

CCSO-914X-245.760

True SineWave
SAW Based Clock Oscillator
9×14mm SMD
5 Volt

Ultra-Low Phase Noise 245.760 MHz SAW Clock



Model CCSO-914X-245.760 is a 245.760 MHz SAW (surface acoustic wave) Clock Oscillator (CCSO). SAW crystal technology provides low-noise and low-jitter performance with true sinewave output. Features include -150 dBc/Hz phase noise at 10kHz offset, 5V input voltage, -40°C to +85°C operating temperature, FR5 PCB and 9×14 mm SMT package. The oscillator has no sub-harmonic and the second harmonic is typically -20dBc.

Applications include:
System Clock for Network Clock Generator/Synchronizer, Clock for DDS, Test and Measurement, Avionics, Point-to-Point Radios, and Multi-point Radios.

CCSO-914X-245.760

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9×14mm SMD
5 Volt

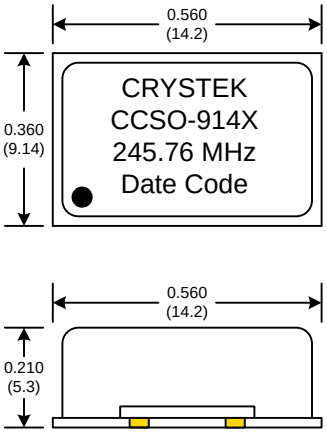
RoHS Compliant

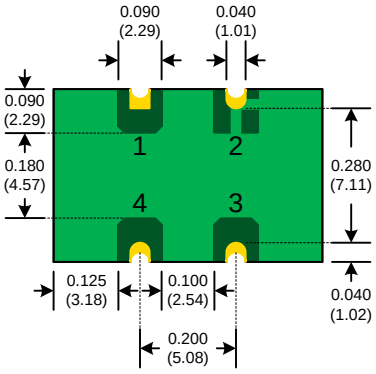
Frequency:	**245.760 MHz**
Temperature Range:	**-40°C to +85°C**
Storage:	**-45°C to 90°C**
Input Voltage:	**5.0V ± 0.25V**
Frequency vs Temperature:	**±150ppm Typical**
Input Current:	**25mA Typical, 35mA Max**
Output:	**True SineWave**
Output Power:	**+8dBm Min into 50 Ω Load**
Start-Up Time:	**2mSec Typical, 10mSec Max**
2nd Harmonic:	**-20dBc Typical, -15dBc Max**
Sub-Harmonics:	**None**
Jitter:	
SONET OC-48(12kHz~80MHz)	**17fS RMS Typical**

Phase Noise Typical:

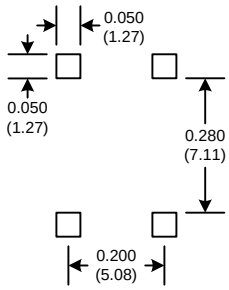
1kHz	**-120 dBc/Hz**
10kHz	**-150 dBc/Hz**
100kHz	**-160 dBc/Hz**
1MHz	**-165 dBc/Hz**
10MHz	**-170 dBc/Hz**

G-sensitivity: **0.9×10^{-9} per g**





SUGGESTED PAD LAYOUT



Pad	Connection
1	N/C
2	GND
3	Output
4	Vdd

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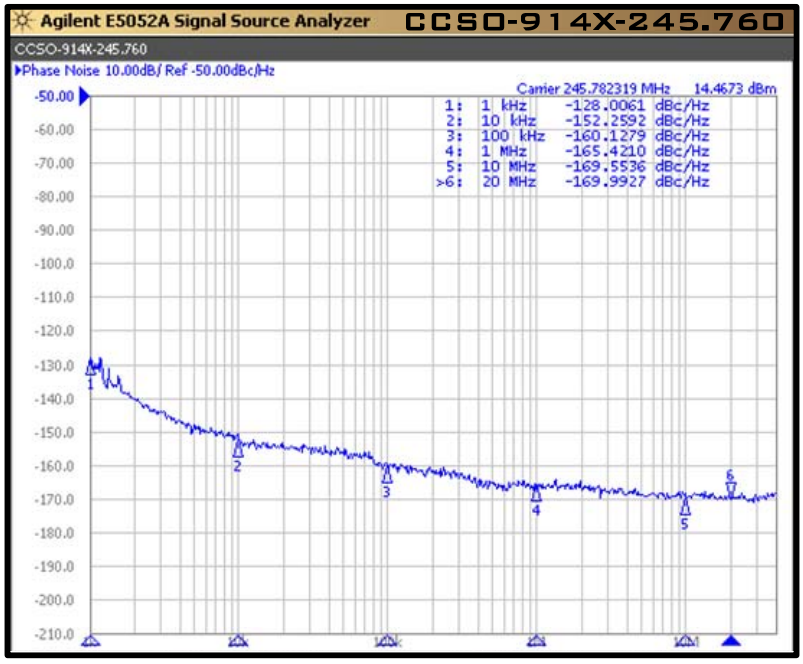
CCSO-914X-245.760

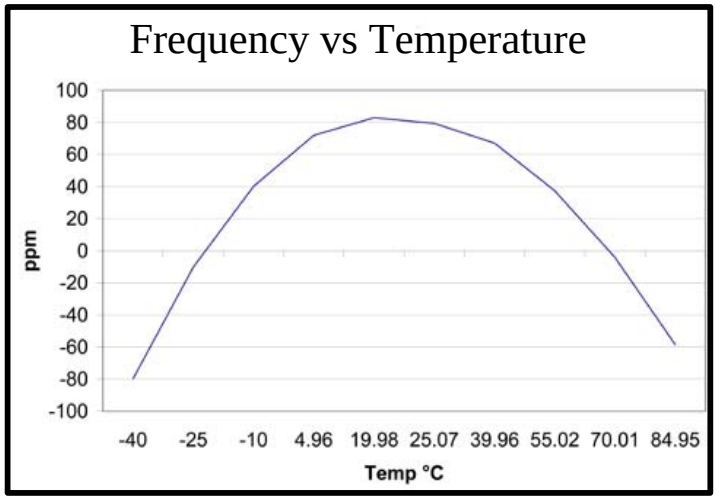
True SineWave

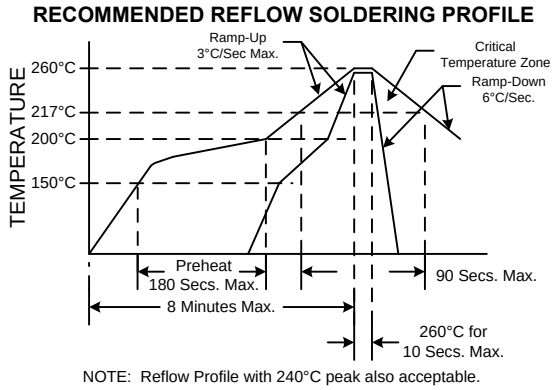
SAW Based Clock Oscillator

9×14mm SMD

5 Volt







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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