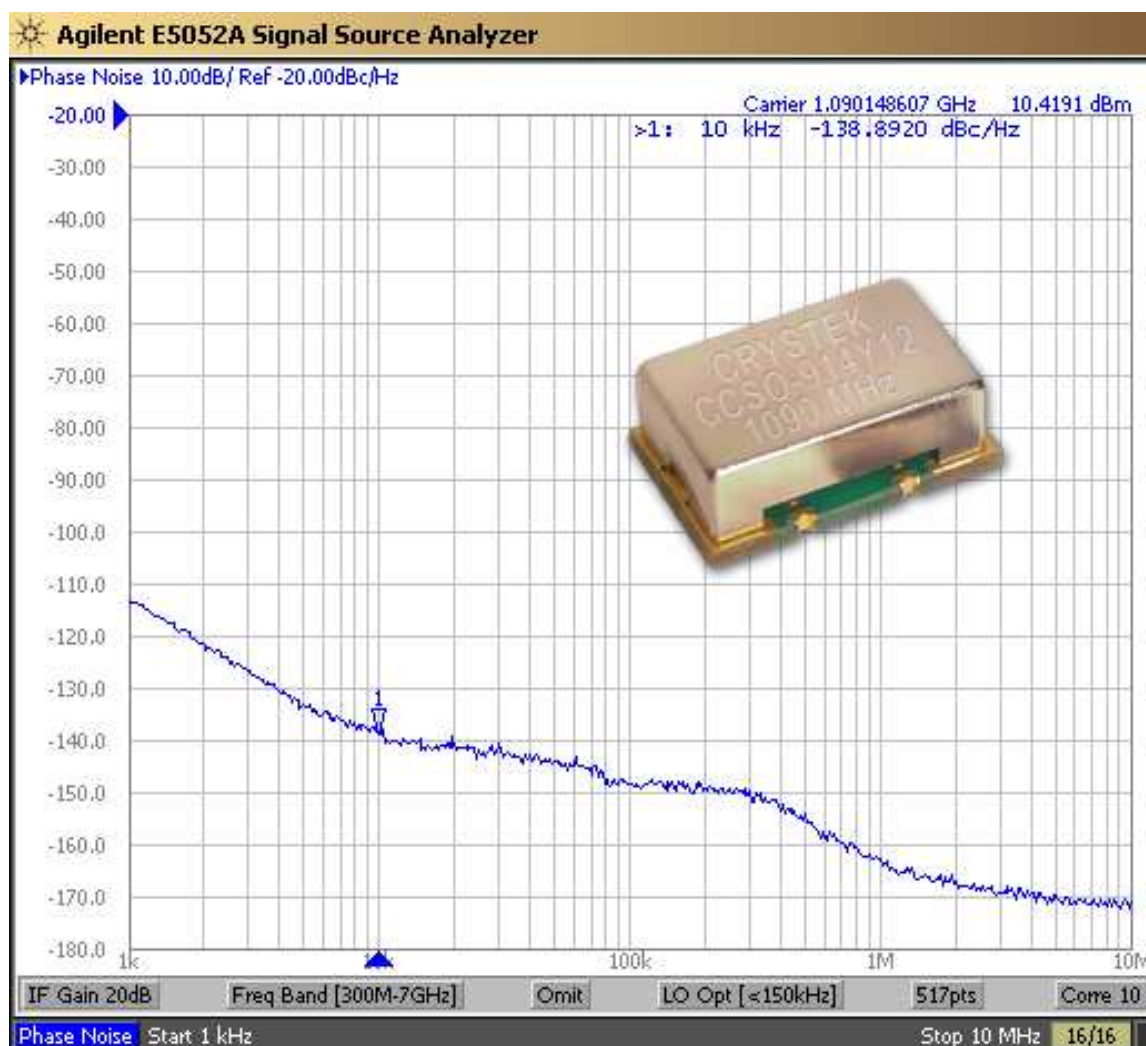


Ultra-Low Phase Noise 1090MHz SAW Clock

CCSO-914Y12-1090
True SineWave
SAW Based Clock Oscillator
9×14mm SMD
12 Volt



Model CCSO-914Y12-1090 is a 1090 MHz SAW (surface acoustic wave) Clock Oscillator (CCSO). SAW crystal technology provides low-noise and low-jitter performance with true sinewave output. Features include -138dBc/Hz phase noise at 10kHz offset, 12V input voltage, -55°C to +105°C operating temperature, FR5 PCB and 9×14 mm SMT package. The oscillator has no sub-harmonic and the second harmonic is typically -20dBc.

Designed for Identification Friend or Foe (IFF) Application.

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CRYSTEK
CRYSTALS
A DIVISION OF CRYSTEK CORPORATION

CCSO-914Y12-1090

True SineWave

SAW Based Clock Oscillator

9×14mm SMD

12 Volt



Frequency: 1090 MHz
Temperature Range: -55°C to +105°C
Storage: -55°C to 110°C
Input Voltage: 12.0V ± 0.25V

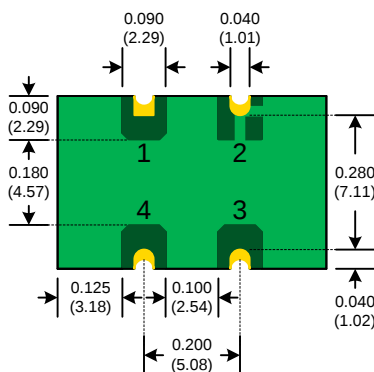
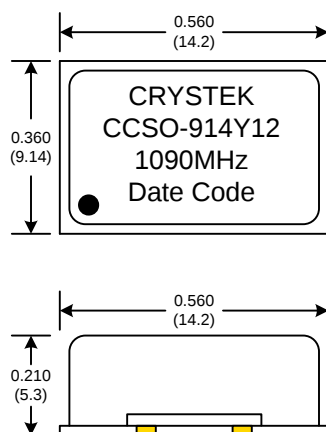
Frequency vs Temperature: ±250ppm Max
Input Current: 30mA Typical, 40mA Max
Output: True SineWave
Output Power: +12dBm ±2dB into 50 ohm Load
Start-Up Time: 2mSec Typical, 10mSec Max
2nd Harmonic: -20dBc Typical, -15dBc Max
Sub-Harmonics: None
Modulation BW: >20kHz @ -3dB



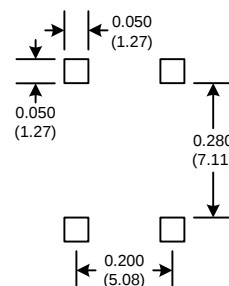
Phase Noise Typical:

1kHz	-110 dBc/Hz
10kHz	-138 dBc/Hz
100kHz	-150 dBc/Hz
1MHz	-160 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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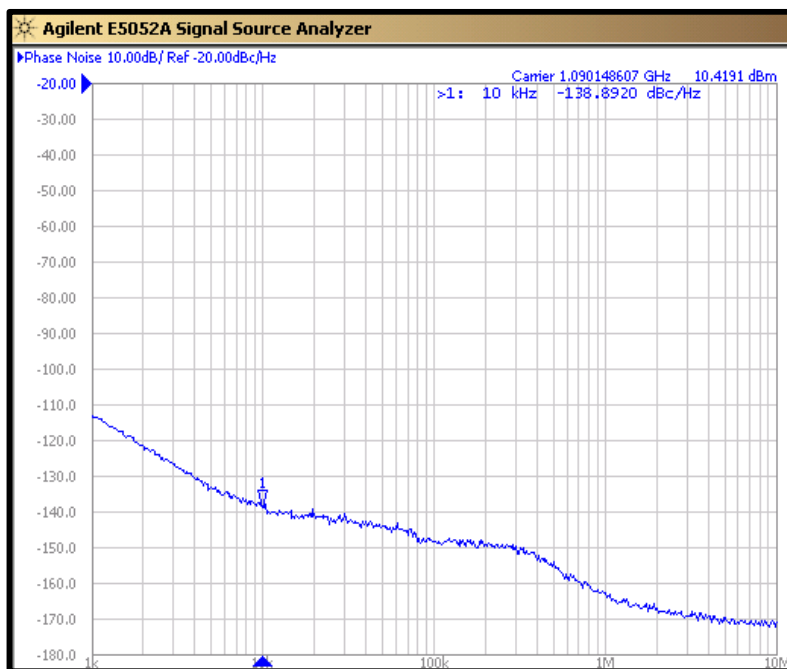


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CORPORATION

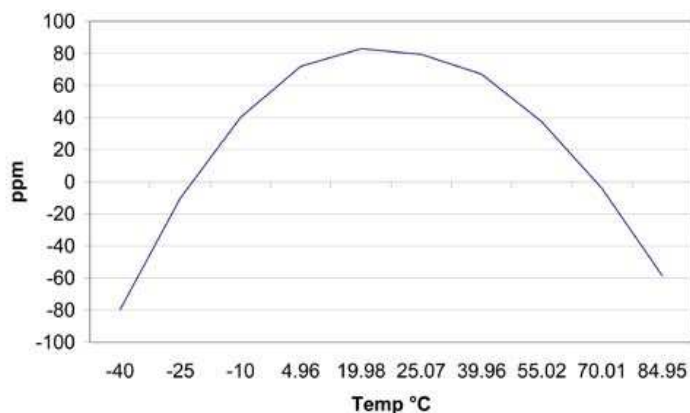
12730 COMMONWEALTH DRIVE • FORT MYERS, FLORIDA 33913
PHONE: 239-561-3311 • 800-237-3061
FAX: 239-561-1025 • WWW.CRYSTEK.COM



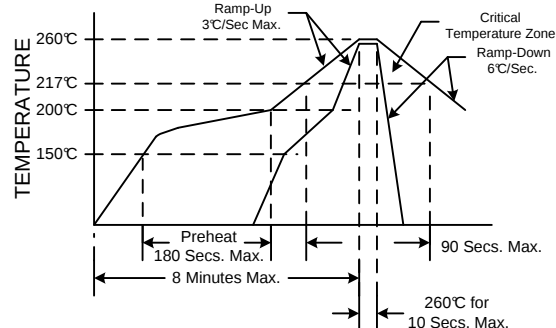
CCSO-914Y12-1090
True SineWave
SAW Based Clock Oscillator
9×14mm SMD
12 Volt



Frequency vs Temperature



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

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