

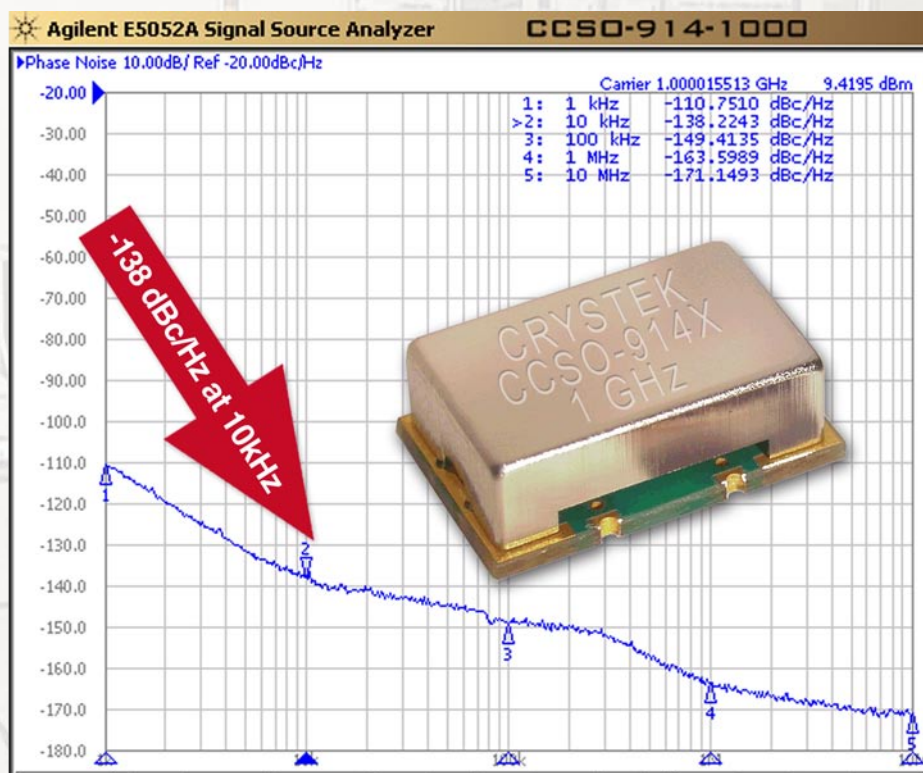


CRYSTEK
CRYSTALS
A DIVISION OF CRYSTEK CORPORATION

CCSO-914X-1000
TRUE SINEWAVE
SAW BASED CLOCK OSC
9X14MM SMD
5 VOLT



Ultra-Low Phase Noise 1GHz SAW Clock



Model CCSO-914-1000 is a 1GHz 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, 5V input voltage, -40 to +85C operating temperature, FR5 PCB and 9x14 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.



CRYSTEK
CORPORATION

12730 COMMONWEALTH DRIVE • FORT MYERS, FL 33913

PHONE: 239-561-3311 • 800-237-3061 Rev.: C

FAX: 239-561-1025 • WWW.CRYSTEK.COM Date: 10-23-07



CCSO-914X-1000

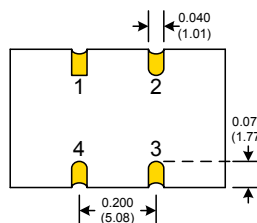
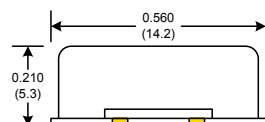
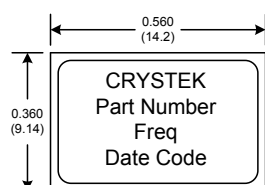
TRUE SINEWAVE
SAW BASED CLOCK OSC
9X14MM SMD
5 VOLT



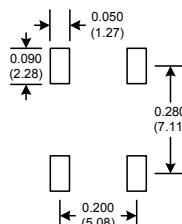
Frequency :	1 GHz
Temperature Range:	-40°C to 85°C
Storage:	-45°C to 90°C
Input Voltage:	5.0V ± 0.25V
Freq. vs Temp.	±100ppm Typ.
Input Current:	25mA Typ., 35mA Max
Output:	True SineWave
Output Power:	+8dBm Min. into 50 Ohm Load
Start-up time:	2ms Typ., 10ms Max
2nd Harmonic:	-20dBc Typ., -15dBc Max
Sub-harmonics:	None
Modulation BW:	>20KHz @ -3dB
Jitter:	
SONET OC-48(12KHz~80MHz)	0.18ps RMS Typ., 0.20ps RMS Max
SONET OC-192(50KHz~80MHz)	0.12ps RMS Typ., 0.15ps RMS Max

Phase Noise Typical:

1KHz	-110 dBc/Hz
10KHz	-138 dBc/Hz
100KHz	-150 dBc/Hz
1MHz	-160 dBc/Hz
10MHz	-170 dBc/Hz



SUGGESTED PAD LAYOUT

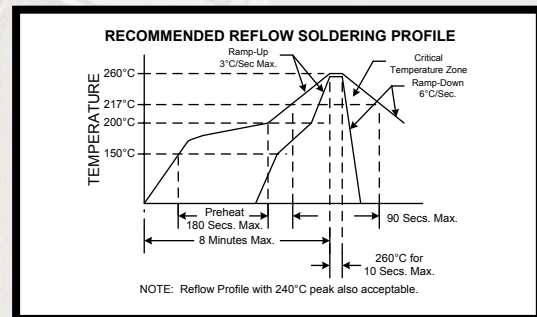
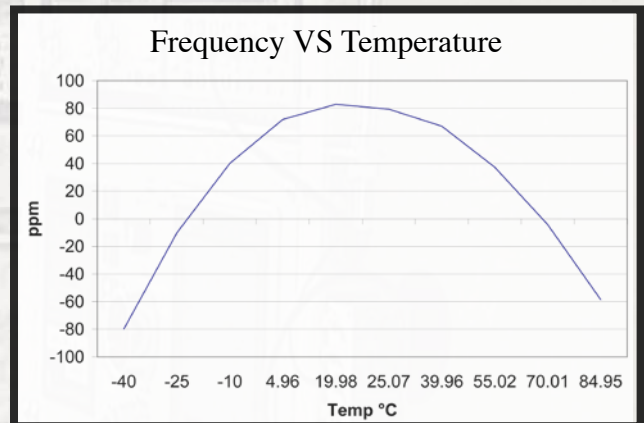
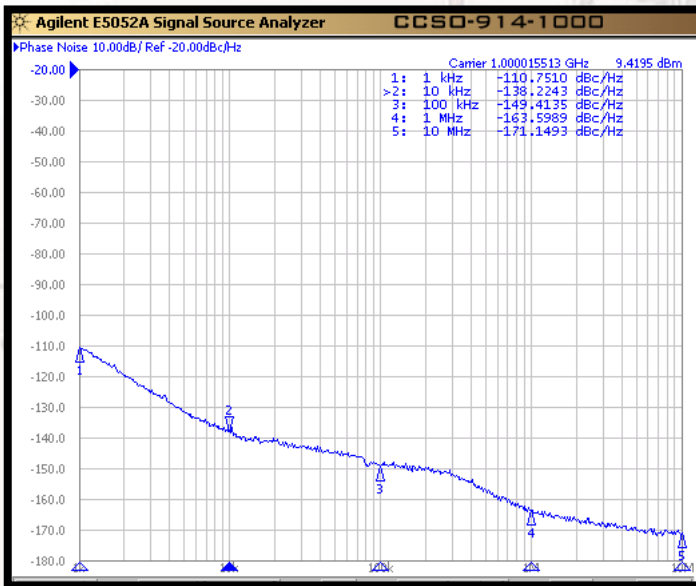


Pad	Connection
1	N/C
2	GND
3	Output
4	Vdd



CRYSTEK
CRYSTALS
A DIVISION OF CRYSTEK CORPORATION

CCSO-914X-1000
TRUE SINEWAVE
SAW BASED CLOCK OSC
9X14MM SMD
5 VOLT



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