

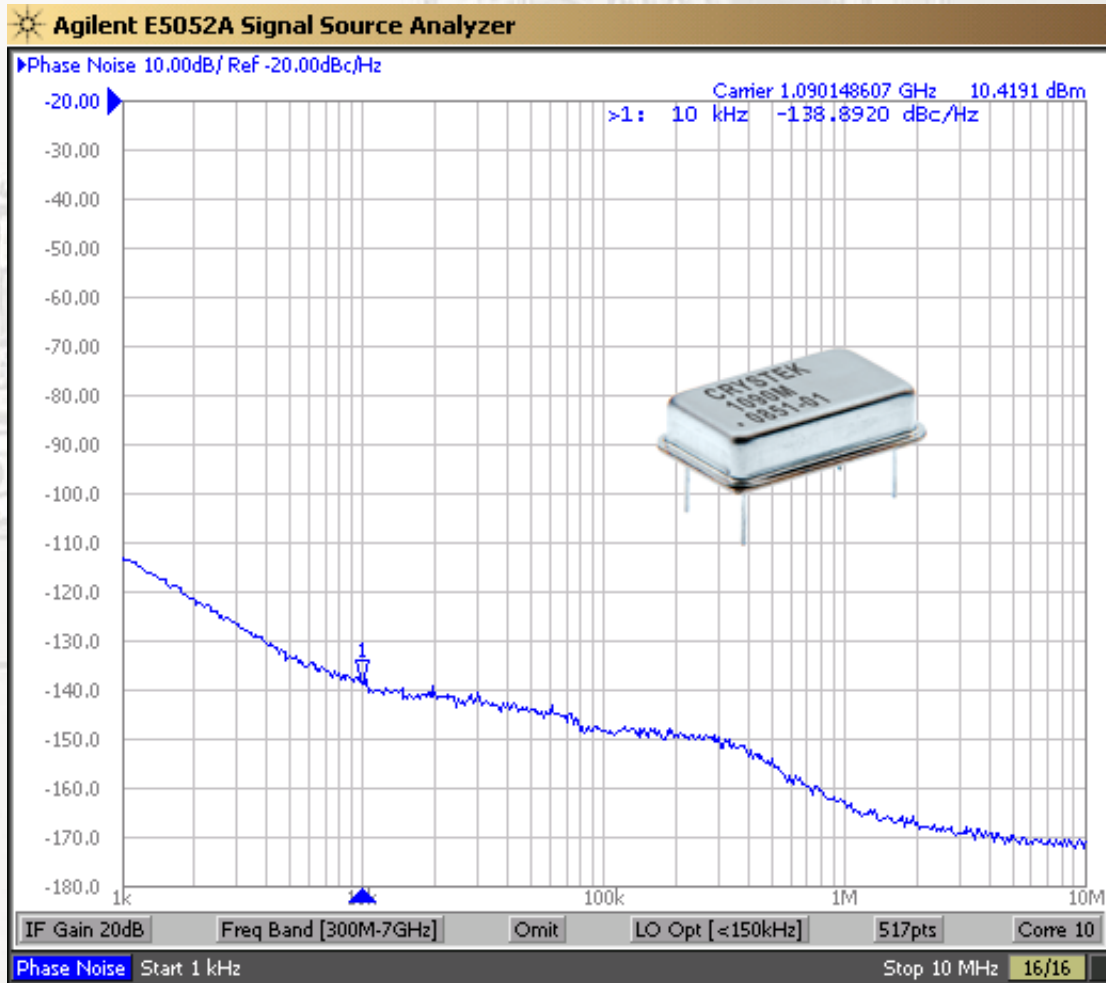


CRYSTEK
CRYSTALS
A DIVISION OF CRYSTEK CORPORATION

CCSO-014-1090
TRUE SINEWAVE
SAW BASED CLOCK OSC
14 PIN DIP
+12 VOLT



1090MHz SAW Clock



Model CCSO-014-1090 is a 1.090GHz 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 to +105C operating temperature, 14 PIN DIP hermetic sealed package. The oscillator has no sub-harmonic and the second harmonic is -40dBc Max.

Designed for Identification Friend or Foe (IFF) application.



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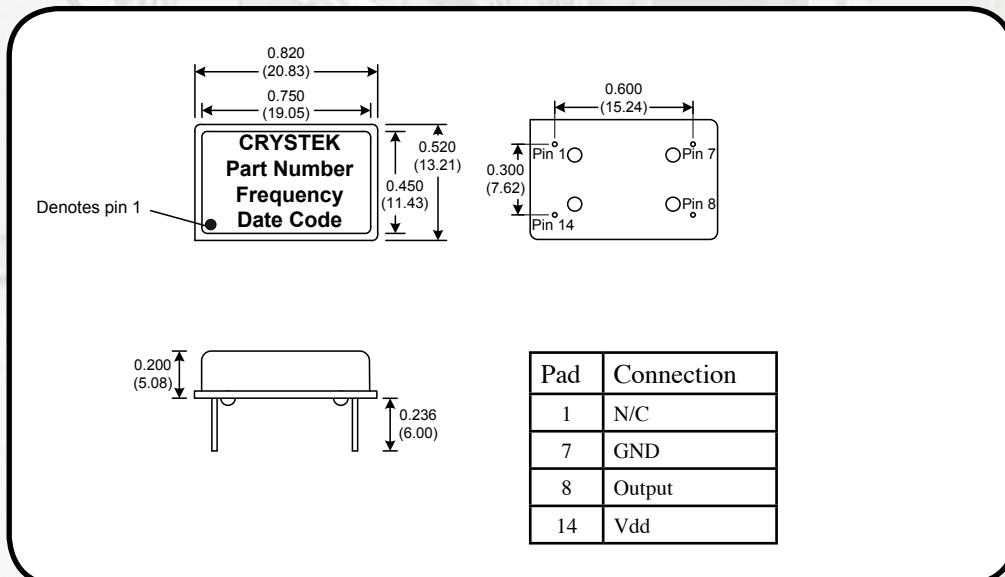


Frequency : 1.090 GHz
Temperature Range: -55°C to 105°C
Storage: -55°C to 110°C
Input Voltage: 12.0V ± 0.25V
Supply Ripple: 150 mV p-p Max
Freq. vs Temp. ±250ppm Typical
Input Current: 30mA Typ., 40mA Max
Output: True SineWave
Output Power: +12dBm ±2dBm
Start-up time: 2ms Typ., 10ms Max
2nd Harmonic: -35dBc Typ., -40dBc Max
Sub-harmonics: None
Load: 50 Ohms

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:

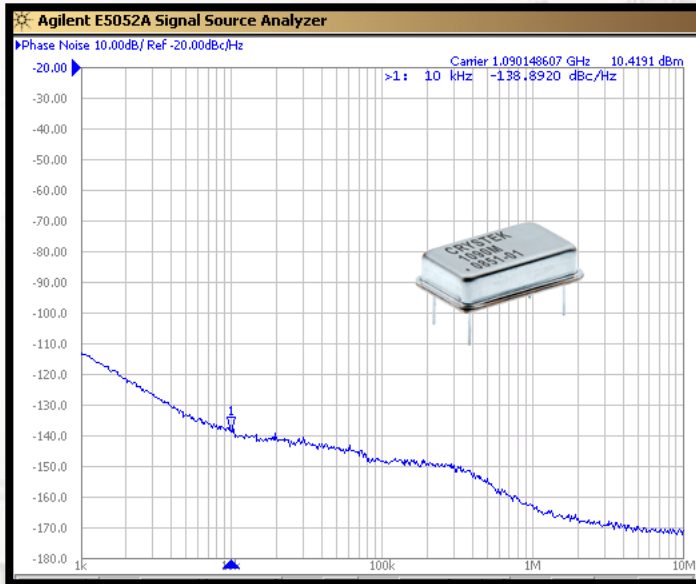
1KHz	-110 dBc/Hz
10KHz	-138 dBc/Hz
100KHz	-150 dBc/Hz
1MHz	-160 dBc/Hz





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Parameter	Conditions
Mechanical Shock	MIL-STD-202, Method 213, Condition A
Mechanical Vibration	MIL-STD-202, Method 204, Condition A
Solderability	MIL-STD-202, Method 208
Solvent Resistance	MIL-STD-202, Method 215
Resistance to Soldering Heat	MIL-STD-202, Method 210, Condition C
Thermal Shock	MIL-STD-202, Method 107, Condition A
Moisture Resistance	MIL-STD-202, Method 106, 90 to 98% RH 10 Days
Terminal Strength	MIL-STD-202, Method 211, Condition A
Hermetic Seal	MIL-STD-202, Method 112, Procedure III, Condition C
Humidity	MIL-STD-202, Method 103
High Temperature Life (Operating)	MIL-STD-202, Method 108, Condition D, 1,000 hrs at +70°C
Acceleration	MIL-STD-202, Method 212, Condition A

Parameter	Conditions
100% Temperature Testing	10°C Steps -55/105°C
100% Start-Up Testing	-55°C and +85°C