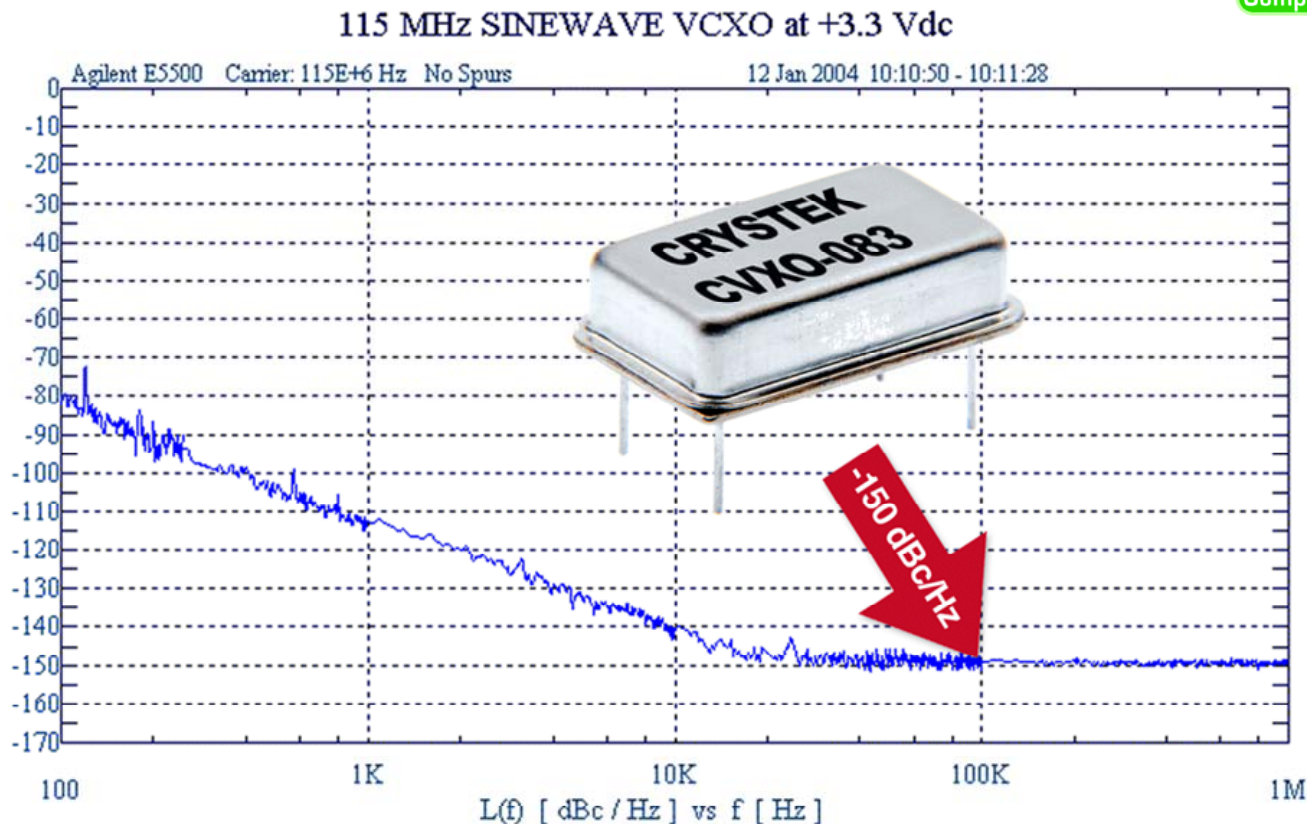


True Sinewave Clock Oscillators and Voltage Controlled Crystal Oscillators



Model CCO-083/085 (Clock Version) and CVXO-083/085 (VCXO Version) generate frequencies from 10 MHz to 200 MHz. This low current sinewave oscillator provides -150 dBc/Hz noise floor while only consuming 8mA typical. Output level is 0dBm Min into 50 ohms, and harmonics are lower than -20 dBc. The series has no sub-harmonics due to the use of Inverted Mesa (High Frequency Fundamental Crystal) technology. The oscillator is offered in an extended operating temperature range (-40°C to +85°C), also available in 3.3V and 5V models. Applications include low current applications and sources for driving PLLs and Mixers.

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True Sinewave Clock Oscillators and Voltage Controlled Crystal Oscillators



Frequency Range:

10.000 MHz to 200.000 MHz

Temperature Range:

0°C to +70°C
-40°C to +85°C

Storage:

-45°C to 90°C

Input Voltage:

(Option X)

(Option 3)

(Option 5)

3.3V ±0.3V

5.0V ±0.5V

Input Current:

8mA Typical, 15mA Max @ 3.3V

12mA Typical, 20mA Max @ 5.0V

Output:

True Sinewave

Load:

50 Ω

Power (std):

0 dBm Min into 50 Ω

(Option B)

+3 dBm Min into 50 Ω

(Option C)

+5 dBm Min into 50 Ω

(Option D)

+7 dBm Min into 50 Ω

Harmonics:

-20 dBc Max

Sub-Harmonics:

None

Enable/Disable:

None

Phase Noise Floor:

-150dBc Typical

Aging:

<3ppm 1st year, <1ppm thereafter

CCO-083/085 Options Temperature Range:

0°C to +70°C (±25ppm Max)

-40°C to +85°C (±50ppm Max)

CVXO-083/085

Frequency Pulling:

±50ppm APR Min

Control Voltage

(083): 1.65V ±1.65V

(085): 2.5V ±2.0V

Settability

(083): 1.65V ±0.25V

(085): 2.5V ±0.5V

Linearity:

±10% Max

Phase Noise Typical:

100 Hz -80 dBc/Hz

1 kHz -112 dBc/Hz

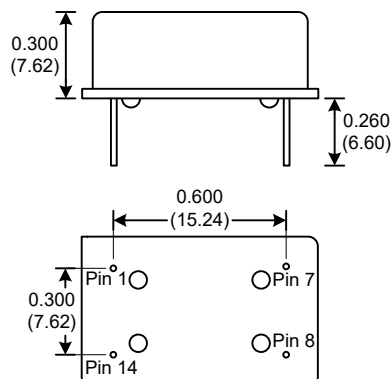
10 kHz -140 dBc/Hz

100 kHz -150 dBc/Hz

Part Number Example

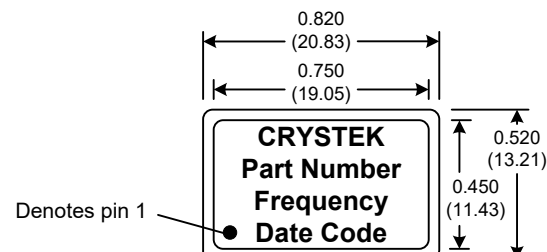
CCO-083-100.000 = 3.3V, 0°C to +70°C (±25ppm), 100 MHz

CVXO-085XC-100.000 = 5.0V, -40°C to +85°C (±50ppmAPR), +5dBm, 100 MHz



Dimensions inches
(mm)

All dimensions are Max unless otherwise specified.



PIN	Connection
1	N/C or Volt Cntrl
7	GND
8	Output
14	Vdd

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