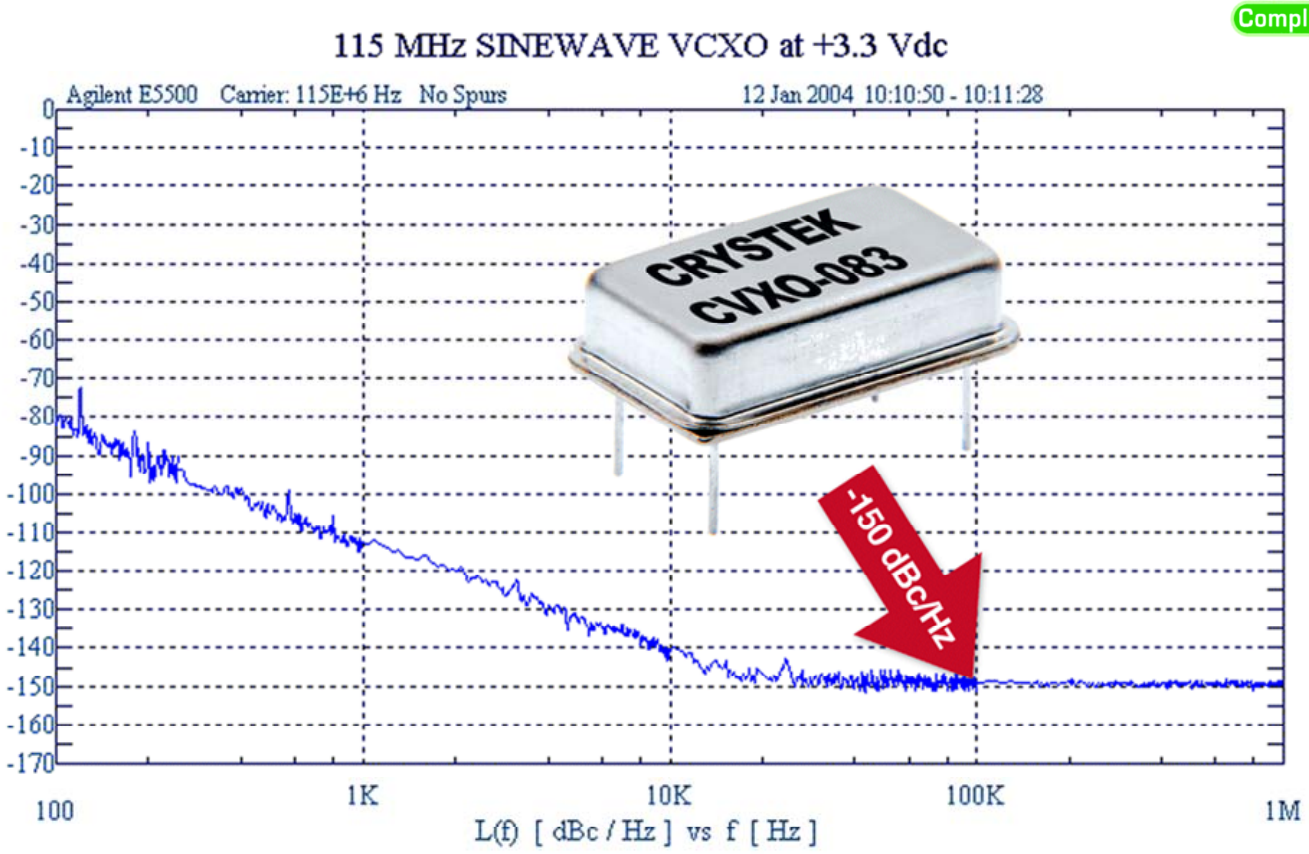
CRYSTEK CRYSTALS
A Division of Crystek Corporation

True Sinewave Clock Oscillators and Voltage Controlled Crystal Oscillators

RoHS Compliant



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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Frequency Range: **10.000 MHz to 200.000 MHz**

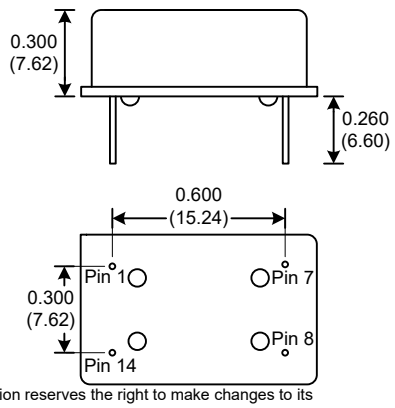
RoHS Compliant

Temperature Range:		0°C to +70°C
	(Option X)	-40°C to +85°C
Storage:		-45°C to 90°C
Input Voltage:	(Option 3)	3.3V ±0.3V
	(Option 5)	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:

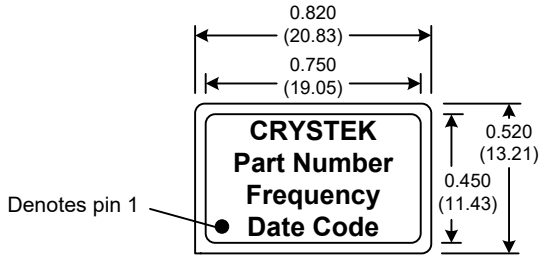
100 Hz	-80 dBc/Hz
1 kHz	-112 dBc/Hz
10 kHz	-140 dBc/Hz
100 kHz	-150 dBc/Hz

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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