

# 5.0Vdc SINE WAVE FULL-SIZE DIP VOLTAGE CONTROLLED CRYSTAL OSCILLATOR



20.8 x 13.2 x 6.8mm

**ACVX1240**



**RoHS Compliant**

## FEATURES:

- Sine wave output into 50Ω
- Reduced EMI
- Available extended temperature range -40°C ~ +85°C
- Available wide pulling option ±150ppm

## APPLICATIONS:

- Phase locked loops (PLL) circuit
- Synthesizers
- EMI reductions meet FCC requirements

## STANDARD SPECIFICATIONS:

Parameters	Minimum	Typical	Maximum	Units	Notes
Frequency Range	8	-----	200	MHz	
Operating Temperature:	0	-----	+70	°C	See options
Storage Temperature:	-55	-----	+125	°C	
Overall Frequency Stability:	-50	-----	+50	ppm	See options
Supply Voltage (Vdd):	+4.75	5.00	+5.25	V	
Supply Current (Idd):	-----	15	20	mA	8 – 20MHz
	-----	20	30	mA	21 – 40MHz
	-----	30	40	mA	41 – 80MHz
	-----	40	50	mA	81 – 100MHz
	-----	50	60	mA	101 – 150MHz
	-----	60	70	mA	151 – 200MHz
Start-up time:	-----	5	10.0	ms	
Output Load:	-----	-----	50	Ω	
Output Level	1.0	-----	-----	Vp-p	
Control Voltage (Vc):	0.5	-----	4.5	Vdc	
Frequency Pull Range:	±100	-----	-----	ppm	See options
Linearity:	-10	-----	+10	%	
RMS Jitter:	-----	0.2	0.5	ps	
Harmonics:	-----	-----	-30	dBc	
Spurious Level:	-----	-----	-60	dBc	
Aging (first year):	-3	-----	+3	ppm	

## OPTIONS & PART IDENTIFICATION:

(Left blank if standard)

ACVX1240 -  MHz -  -  -  -

**Frequency in MHz**  
Please specify the frequency in MHz.  
e.g. 14.31818MHz

**Operating Temp.**  
I: 0°C ~ +50°C  
D: -10°C ~ +60°C  
E: -20°C ~ +70°C  
F: -30°C ~ +70°C  
N: -30°C ~ +85°C  
L: -40°C ~ +85°C

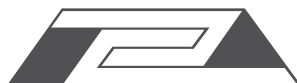
**Freq. Stability**  
J\*: ±20ppm  
R: ±25ppm  
K: ±30ppm  
H: ±35ppm

\* Temp. option I,D,E and 0°C ~ +70°C only

**Pulling**  
Blank: ±100ppm  
N05: ±50ppm  
N07: ±75ppm  
N15: ±150ppm  
N20: ±200ppm  
N25: ±250ppm  
N30: ±300ppm

**Trimmed Lead**  
G: Gull Wing  
Q45: 0.45 (11.43)  
Q40: 0.40 (10.16)  
Q35: 0.35 (8.89)  
Q30: 0.30 (7.62)  
Q25: 0.25 (6.35)  
Q20: 0.20 (5.08)  
Q15: 0.15 (3.81)  
Q10: 0.10 (2.54)

ABRACON IS  
ISO9001:2008  
CERTIFIED



**ABRACON CORPORATION**

Visit [www.abracon.com](http://www.abracon.com) for Terms & Conditions of Sale **Revised: 09.28.10**  
30332 Esperanza, Rancho Santa Margarita, California 92688  
tel 949-546-8000 | fax 949-546-8001 | [www.abracon.com](http://www.abracon.com)

# 5.0Vdc SINE WAVE FULL-SIZE DIP VOLTAGE CONTROLLED CRYSTAL OSCILLATOR

**ACVX1240**

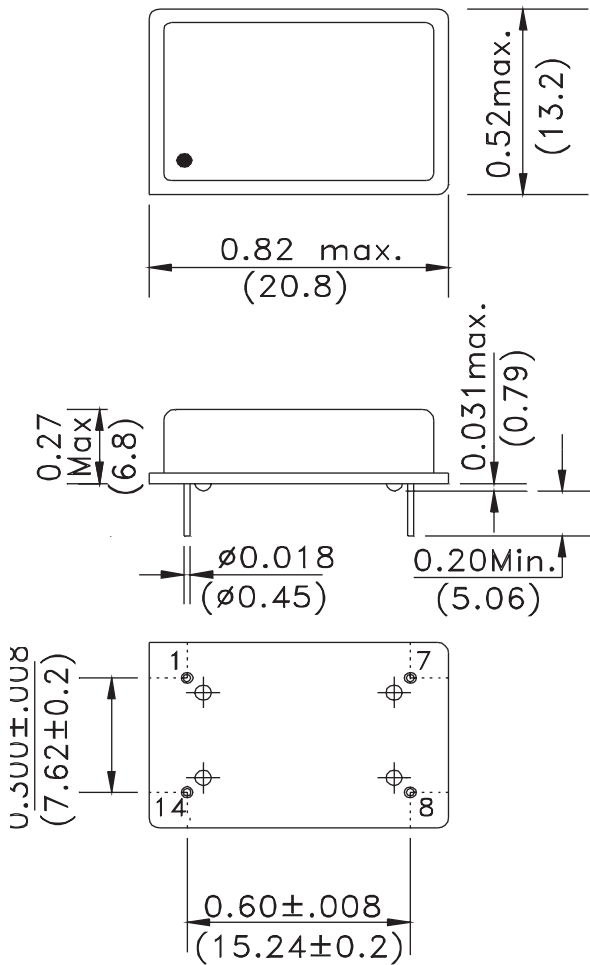


**RoHS**  
Compliant

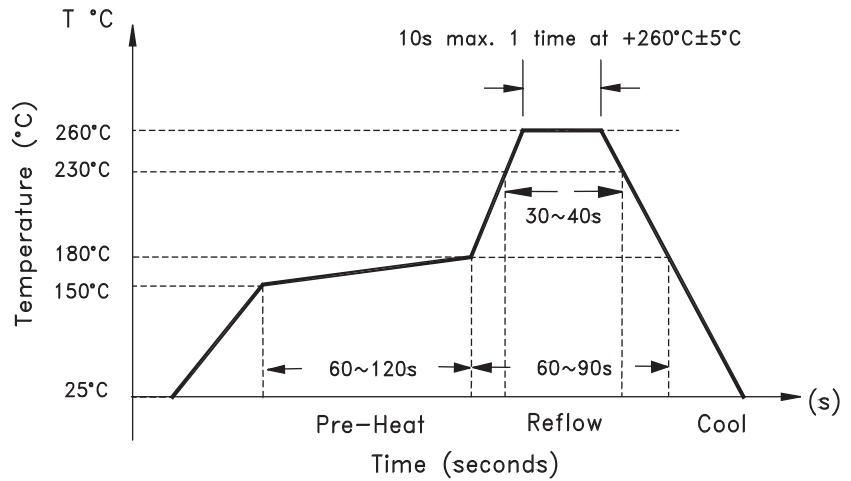


20.8 x 13.2 x 6.8mm

## OUTLINE DRAWING:



## REFLOW PROFILE:



PIN	FUNCTION
1	Vc
7	GND/Case
8	Output
14	VDD

Note: It is recommended to use an approximately 0.01uF bypass capacitor between PIN 7 and 14.

Dimensions: Inches (mm)

**ATTENTION:** Abracon Corporation's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon Corporation is required. Please contact Abracon Corporation for more information.

ABRACON IS  
ISO9001:2008  
CERTIFIED



Visit [www.abracon.com](http://www.abracon.com) for Terms & Conditions of Sale **Revised: 09.28.10**  
30332 Esperanza, Rancho Santa Margarita, California 92688  
tel 949-546-8000 | fax 949-546-8001 | [www.abracon.com](http://www.abracon.com)