TTL/CMOS 3.3Vdc VOLTAGE CONTROLLED CRYSTAL OSCILLATOR

ACVX1220L

20.2 x 12.6 x 5.03 mm

Pb RoHS Compliant

FEATURES:

- Large frequency pulling available
- Hermetically sealed
- Tight Symmetry Available

APPLICATIONS:

- Phase locked loops (PLLs)
- Clock recovery
- Synthesizers
- Reference signal tracking

STANDARD SPECIFICATIONS:

PARAMETERS	
ABRACON P/N	ACVX1220L Series
Frequency Range	1.0MHz to 120.0MHz
Operating Temperature	0°C to + 70°C (see options)
Storage Temperature	-40°C to + 85°C
Freq. Stability vs. Temperature	± 100ppm max. (see options)
Freq. Stability vs. Aging	± 5ppm/yr max.
Freq. Stability vs. Supply Volt.	± 5ppm max.
Supply Voltage (Vdd)	3.3 Vdc ±5%
Supply Current (Idd)	See Table 1
Symmetry	40/60% max. @ 1/2 Vdd (see option)
Rise & Fall Time (Tr/Tf)	10ns max.
Output Load	TTL/CMOS (15pF or 5TTL gate)
Output Voltage	VOH=0.9*Vdd min. ; VOL=0.4*Vdd max.
Transfer Function	Positive
Control Voltage (Vc)	0.3Vdc to 3.0Vdc
Center Voltage	1.5 VDC ±0.25V
Frequency Deviation	± 100ppm min. (see options)
Linearity	± 10% max.
Start-up Time	10ms. max.

Table 1

Freq MHz	Idd max. mA
<=24	25
<=45	30
<=70	60
<=160	90

OPTIONS & PART IDENTIFICATION:

(Left blank if standard)

ACVX1220L - Frequency - □ - □ - □ - □ - □

Frequency
XXX.XXXMHz

Operating Temp.	
D	-10°C to +60°C
E	-20°C to +70°C
F	-30°C to +70°C
N	-30°C to +85°C
L	-40°C to +85°C

Frequency Stability	
Y	±10ppm
J	±20ppm
R	±25ppm
K	±30ppm
H	±35ppm
C	±50ppm

Symmetry	
S	45/55%@0.5Vdd
S1	45/55%@1.4Vdd

Pulling	
N05	± 50ppm
N15	± 150ppm
N20	± 200ppm
N25	± 250ppm
N30	± 300ppm

Trimed 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)

30332 Esperanza, Rancho Santa Margarita, California 92688
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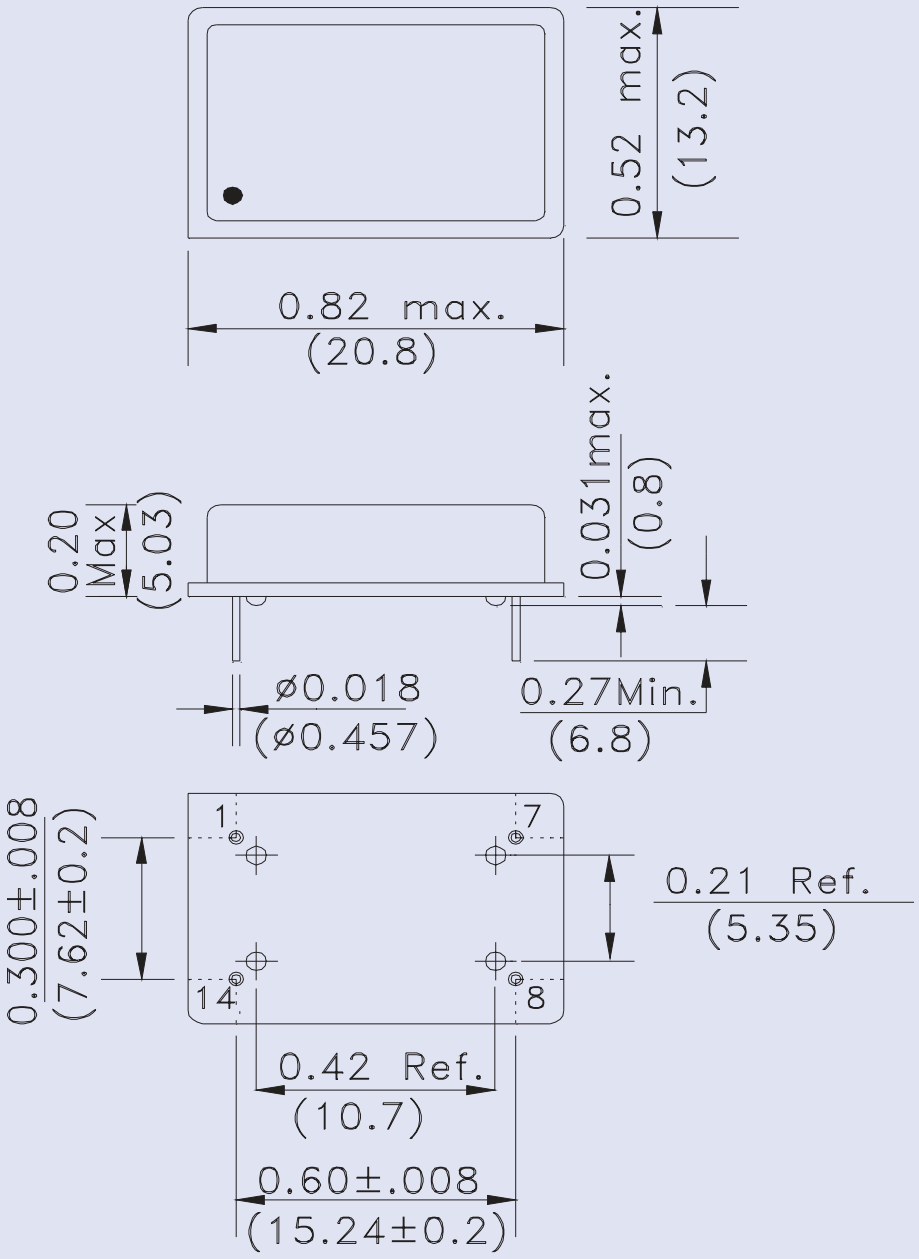
OUTLINE DRAWING:



Dimensions: Inches (mm)

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.

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