CMOS VOLTAGE CONTROLLED SMD CRYSTAL OSCILLATOR



3.2 x 2.5 x 0.9 mm

ASEV Series

Pb RoHS Compliant

FEATURES:

- Miniture ceremic package, Size: 3.2 x 2.5 x 0.9mm
- Low current consumption
- Wide pulling range
- CMOS output with Tri-state function
- Seam sealed package with high reliability
- IR Reflow capable

APPLICATIONS:

- Digital TV-tuner, Digital Video, DVD, DSC, etc.

STANDARD SPECIFICATIONS:

PARAMETERS	
ABRACON P/N	ASEV Series
Frequency range	1.5 ~ 54 MHz
Standard frequency	27MHz, 32.768MHz, 54MHz
Operating temperature	-10° C to + 70° C (see options)
Storage temperature	- 40° C to + 85° C
Overall frequency stability	± 100 ppm max. (see options)
Supply voltage (Vdd)	3.3 V ± 5% (see options)
Supply current	See Table 1
Symmetry	40/60 % @ 1/2Vdd
Rise and fall time (Tr/Tf)	6ns max. (0.1V*Vdd to 0.9*Vdd)
Output load	CMOS (15 pF max.)
Output voltage	VOH = 0.9 *Vdd min. VOL = 0.1 *Vdd max.
Phase noise	-130dBc/Hz max. @ 1kHz offset
Control voltage (Vc)	See Table 1
Pullability	See Table 1

TABLE 1

Vdd (V)	Supply Current (mA max.)	Vc (V)	Pullability (ppm)
3.3 (STD)	13	+1.65±1.65	±100
2.8	9	+1.40±1.40	±90
1.8*	3	+0.90±0.90	±80

***1.8V is available in Q4 2008.**

OPTIONS AND PART IDENTIFICATION:

(Left blank if standard)

ASEV□ - Frequency - □ - □ - □

Supply Voltage	
Blank	3.3V
2	2.8V
3	1.8V*

***1.8V is available in Q4 2008.**

Operating Temp. Range	
I	0°C to +50°C
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

Overall Frequency Stability	
J(**)	±20ppm
R	±25ppm
K	±30ppm
H	±35ppm
B	±40ppm
C	±50ppm

Packaging	
Blank	Bulk
T	Tape and Reel

(**)Temp options I, D, E and -10° C to + 70° C only"

Please contact ABRACON if parts are intended for life dependent applications.

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HCMOS/TTL COMPATIBLE VOLTAGE CONTROLLED CRYSTAL OSCILLATOR

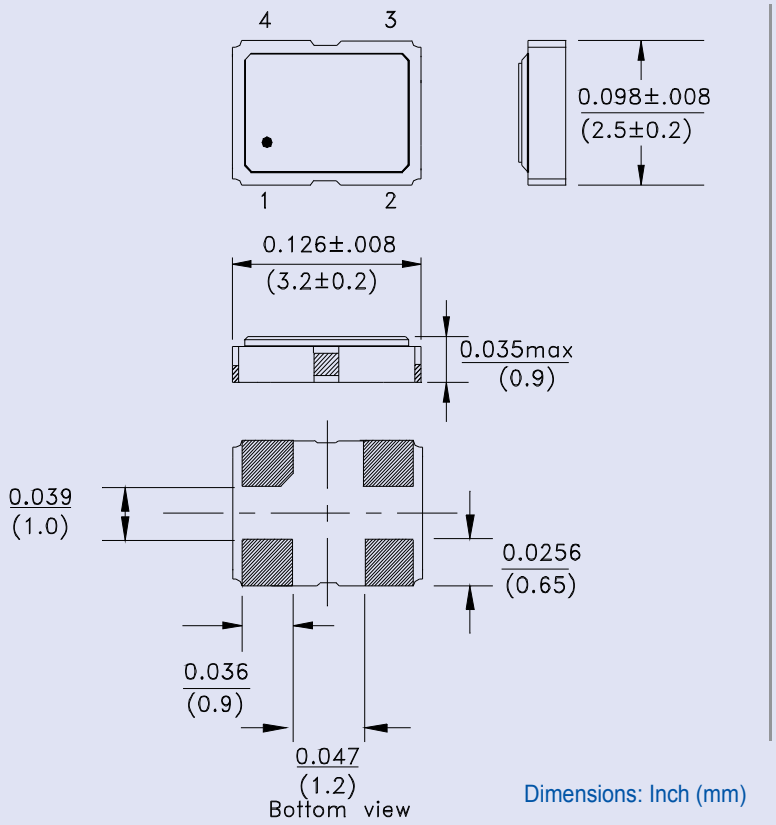
ASEV Series



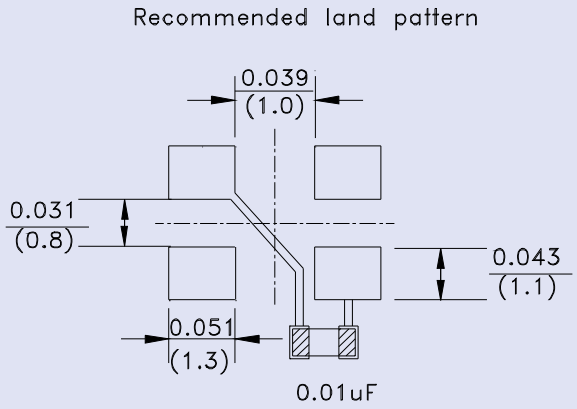
3.2 x 2.5 x 0.9 mm

Pb RoHS Compliant

OUTLINE DRAWING:



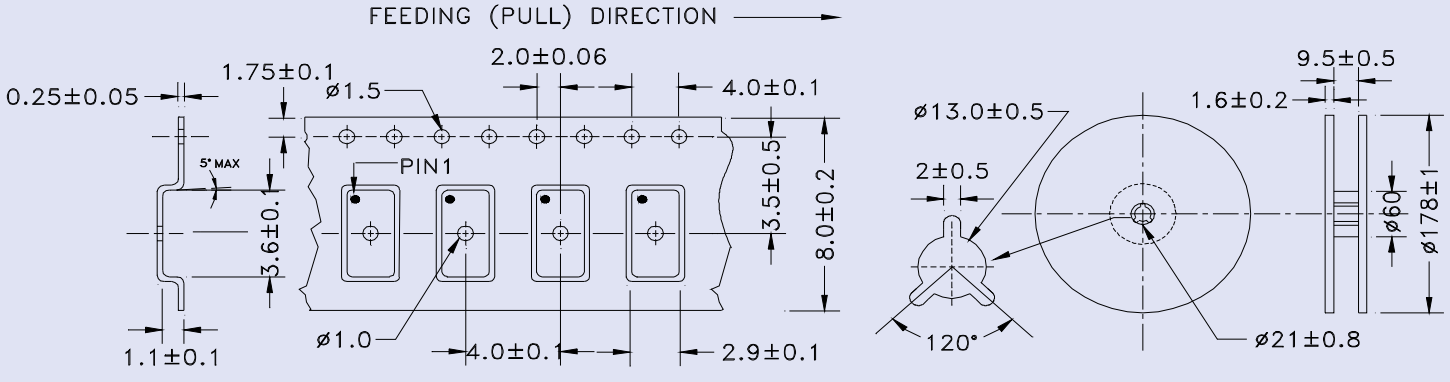
Dimensions: Inch (mm)



PIN	FUNCTION
1	Vc
2	GND/Case
3	Output
4	Vdd

Note: It is recommended to use an approximately 0.01uF bypass capacitor between PIN 2 and 4.

TAPE & REEL: 1,000 pcs/reel



Dimensions: mm