

# 1.5V CMOS COMPATIBLE 3.2 x 2.5 SMD CRYSTAL CLOCK OSCILLATOR



3.2 x 2.5 x 1.0 mm

ASE4 SERIES



## FEATURES:

- Compact and low in height
- Low current consumption
- Tri state function
- 1.5Vdc supply voltage ideal for low power ASIC's
- Ideal for high density SMT
- IR reflow capable
- Tight stability option

## APPLICATIONS:

- CCD clock for VTR camera
- Equipment connected to PC or PC cards
- Thin equipment
- Mobile communications
- PDA

## STANDARD SPECIFICATIONS:

### PARAMETERS

ABRACON P/N	ASE4 Series
Frequency range:	1MHz ~ 50 MHz (Available frequency is limited. Please contact ABRACON.)
Standard Frequency:	25MHz
Operating temperature:	-10° C to + 70° C (see options)
Storage temperature:	- 55° C to + 125° C
Overall frequency stability:	± 50 ppm max. (see options)
Supply voltage (Vdd):	1.5 Vdc ± 5 %
Current Consumption:	10mA max (25MHz)
Symmetry:	45/55 % @ 0.75V
Rise and fall time (Tr/Tf):	10 ns max (25MHz)
Output load:	15pF ± 10
Output voltage:	VOH = 0.9 * Vdd min. VOL = 0.1 * Vdd max.
Tri-state function :	"1" (VIH >= 1.35 Vdd) or open: Oscillation "0" (VIL < 0.15 Vdd) : Hi Z
Peak to Peak Jitter :	45.0ps (Typical)(Reference only. Contact ABRACON for the Jitter)
RMS Jitter :	4.0ps (Typical)(Reference only. Contact ABRACON for the Jitter)
Stand-by current:	10µA max.
Aging:	± 5 ppm/first year

## OPTIONS & PART IDENTIFICATION:

(Left blank if standard)

### ASE4 - Frequency - - -

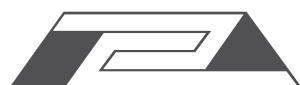
Operating Temp.	
I	0°C to +50°C
D	-10°C to +60°C
E	-20°C to +70°C
F	-30°C to +70°C
N	-30°C to +85°C
L	-40°C to +85°C

Contact ABRACON for

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

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

Packaging	
T	Tape and Reel



# 1.5Vdc CMOS COMPATIBLE 3.2 x 2.5 smd CRYSTAL CLOCK OSCILLATOR



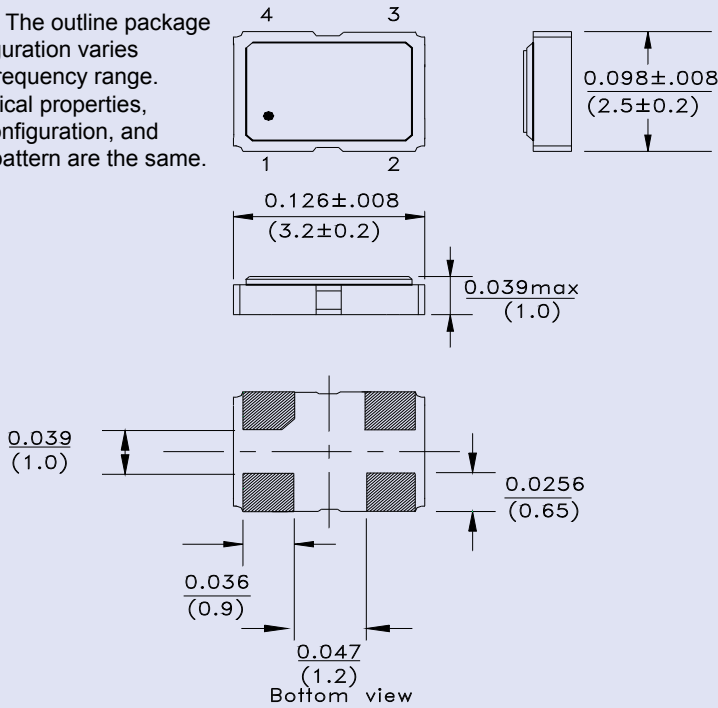
3.2 x 2.5 x 1.0 mm

ASE4 SERIES



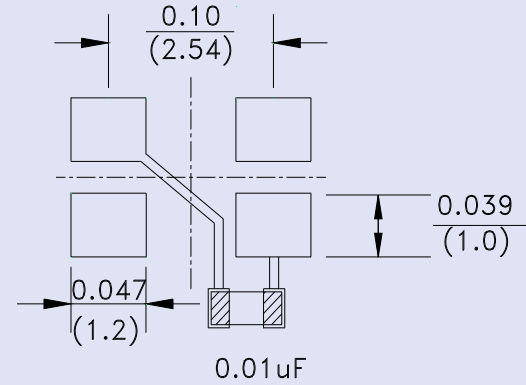
## OUTLINE DRAWING:

**Note:** The outline package configuration varies with frequency range. Electrical properties, pin configuration, and land pattern are the same.



Dimension: Inch (mm)

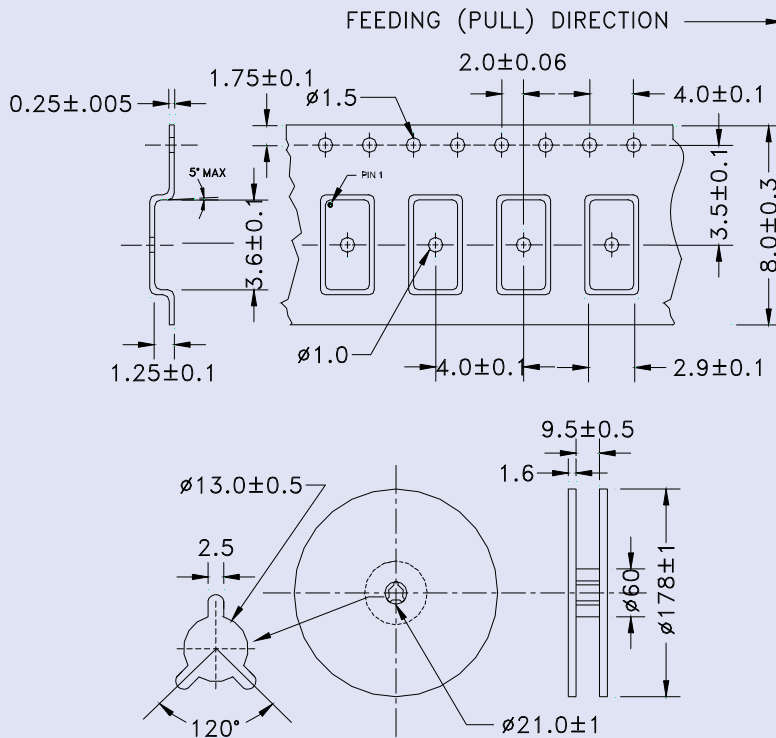
## Recommended land pattern



PIN	FUNCTION
1	Tri-state
2	GND/Case
3	Output
4	Vdd

**Note:** Recommend using an approximately 0.01uF bypass capacitor between PIN 2 and 4.

## TAPE & REEL 1,000 pcs/reel:



Dimension: mm