

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 low power ASIC's
- Low supply voltage 1.5V
- 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

STANDARD SPECIFICATIONS:

PARAMETERS

Abracon P/N	ASE4 Series
Frequency range:	1MHz ~ 50 MHz New for Q3 2008: Please contact ABRACON for current listing of developed frequencies.
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 % @ 0.75 V
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

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

Packaging	
T	Tape and Reel

* I, D, E, and -10 to +70C only

Contact ABRACON for wider temperature range.



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OUTLINE DRAWING:

Top view dimensions: 0.126±.008 (3.2±0.2) mm width, 0.098±.008 (2.5±0.2) mm height.

Side view dimensions: 0.039max (1.0) mm thickness.

Bottom view dimensions: 0.039 (1.0) mm pin height, 0.0256 (0.65) mm pin width, 0.036 (0.9) mm pin pitch, 0.047 (1.2) mm pin length.

Recommended land pattern dimensions: 0.10 (2.54) mm pad width, 0.039 (1.0) mm pad height, 0.047 (1.2) mm pad length.

0.01 uF bypass capacitor is recommended between PIN 2 and 4.

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.

Dimension: Inch (mm)

TAPE & REEL 1,000 pcs/reel:

Carrier tape dimensions: 2.0±0.06 mm width, 8.0±0.3 mm height, 4.0±0.1 mm pitch between components.

Reel dimensions: 13.0±0.5 mm diameter, 21.0±1 mm diameter, 178±1 mm length, 6.0 mm width.

Other dimensions: 0.25±.005 mm lead width, 1.75±0.1 mm lead length, 5° MAX lead angle, 1.25±0.1 mm lead offset, 3.6±0.1 mm carrier width, 1.6 mm reel width, 9.5±0.5 mm reel diameter, 120° reel angle.

Dimension: mm