

2.5Vdc CMOS COMPATIBLE SMD CRYSTAL CLOCK OSCILLATOR



ASE2

3.2 x 2.5 x 1.1mm



RoHS
Compliant

ASE2 SERIES

FEATURES:

- Compact and low in height at 1.1mm
- Low current consumption
2mA typ. for 19.2MHz
- Tri state function
- Suitable for RoHS reflow
- Tight stability option ± 20 ppm for -40 to +85C
- Seam sealed package assures high reliability

APPLICATIONS:

- CCD clock for VTR camera
- Equipment connected to PC or PC cards
- Wireless communication

STANDARD SPECIFICATIONS:

PARAMETERS	
ABRACON P/N	ASE2 Series
Frequency Range	0.625 ~ 166 MHz
Operating Temperature	-10°C to + 70°C (See Options)
Storage Temperature	-55°C to + 125°C
Overall Frequency Stability	± 100 ppm max. (See Options)
Supply Voltage (Vdd)	2.5 V $\pm 5\%$
Input Current	See Table 1
Symmetry	45/55% @ 1/2 %Vdd
Rise and Fall Time (Tr/Tf)	See Table 1
Output Load	15 pF (max)
Output Voltage	VOH = 0.9* Vdd min., VOL = 0.1* Vdd max.
Tristate Function	"1" (VIH ≥ 0.7 Vdc) or open: Oscillation, "0" (VIL < 0.3 Vdc) : Hi Z
Peak to Peak Jitter	See Table 1
RMS Jitter	See Table 1
Start-up Time	10ms max.
Aging	± 5 ppm max.
Stand-by current:	10 μ A max.

TABLE 1- Input Current

Frequency (MHz)	I _{dd} mA (Typ)	I _{dd} mA (Max)	Tr/Tf ns (Typ)	Tr/Tf ns (max)	Start-up time ms (Typ)	Start-up time ms (Max)	RMS Jitter ps (Typ)	RMS Jitter ps (Max)
0.625~19.99	2	8	3	5	0.6	3	2	5
20~31.99	3	8	3	5	0.6	3	2	5
32~59.99	5	15	3	5	0.6	3	2	5
~125	12	20	3	5	1.3	2	2	5

OPTIONS & PART IDENTIFICATION:

(Left blank if standard)

ASE2 - MHz - -

Frequency in MHz
e.g. 24.576MHz
14.31818MHz
26.000MHz

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

Contact ABRACON for wider temperature range.

Freq. Stability
J*: ± 20 ppm
R: ± 25 ppm
K: ± 30 ppm
H: ± 35 ppm
B: ± 40 ppm
C: ± 50 ppm

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

Packaging
Blank: Bulk
T: Tape & Reel

ABRACON IS
ISO9001:2008
CERTIFIED



ABRACON
CORPORATION

Visit www.abracon.com for Terms & Conditions of Sale **Revised: 06.22.10**
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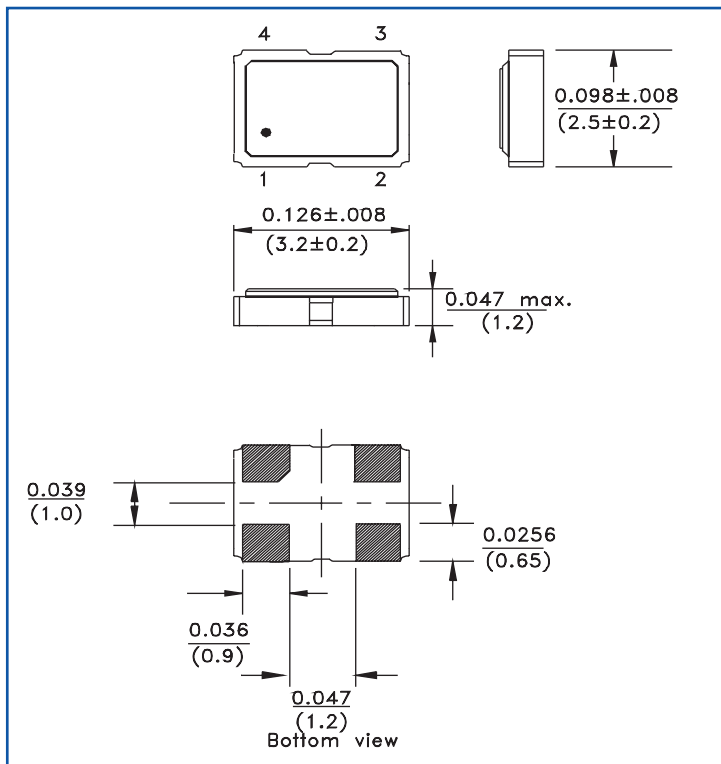
ASE2

3.2 x 2.5 x 1.1mm

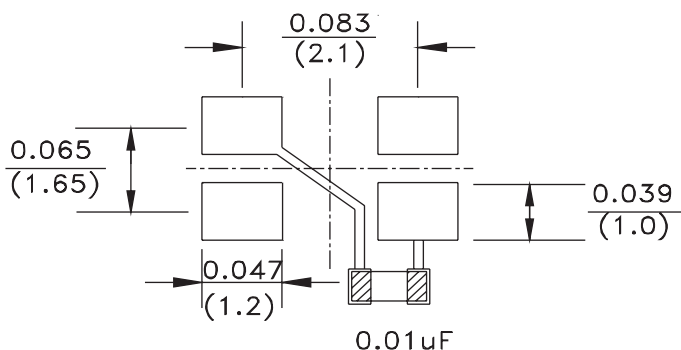
ASE2 SERIES



OUTLINE DRAWING:



Recommended land pattern



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

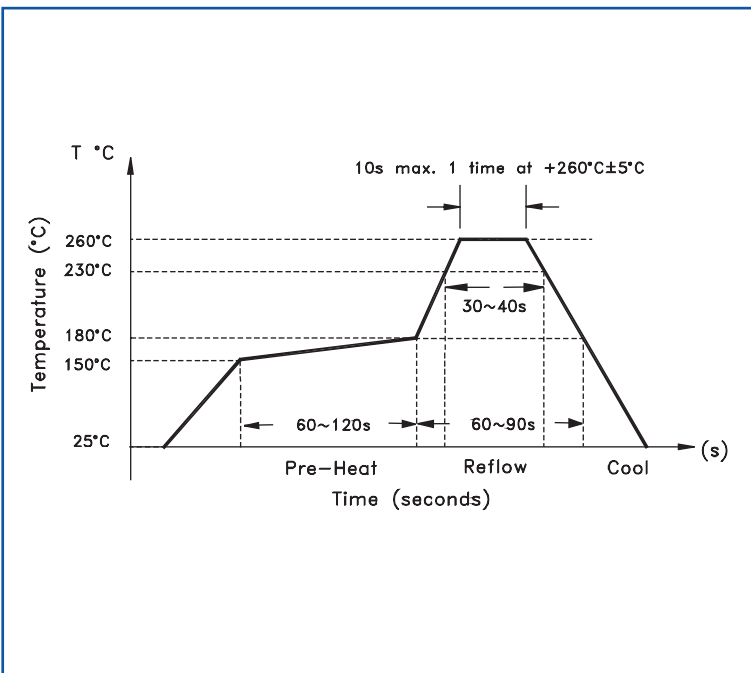
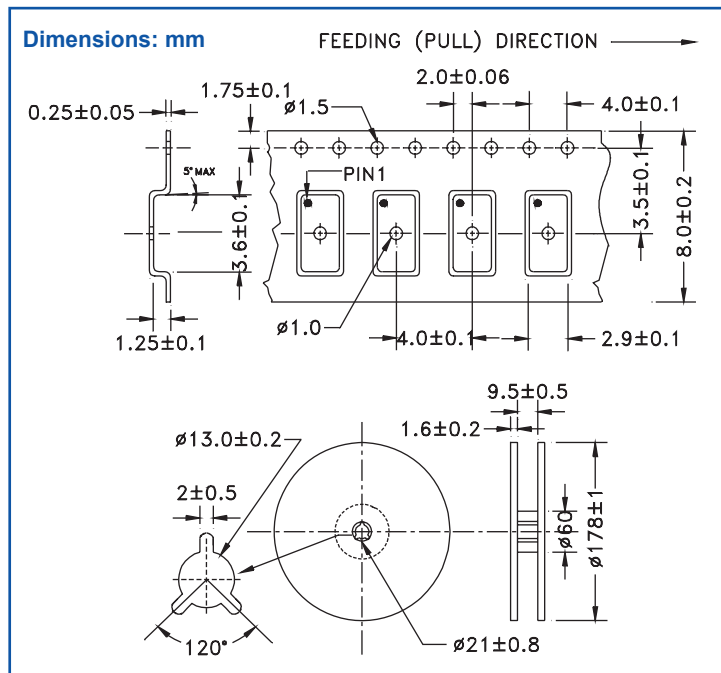
Note: It is recommended to use an approximately 0.01uF bypass capacitor between PIN 2 and 4.

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

Dimensions: Inches (mm)

TAPE & REEL: T = Tape and reel 1,000pcs/reel

REFLOW PROFILE



Need a test socket for the ASE2 Series? To view compatible **PRECISION TEST & BURN-IN SOCKETS** for these parts, [click here](#).

NOTE: Abracon manufactured products are intended for general commercial and industrial use. For applications requiring high reliability and/or presenting extreme operating environment, written consent & authorization from Abracon is required.

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