

1.8V CMOS COMPATIBLE SMD CRYSTAL CLOCK OSCILLATOR

ASE3 SERIES



RoHS
Compliant



3.2 x 2.5 x 1.25mm

FEATURES:

- Compact and low in height
- Tri state
- Low supply voltage
- Suitable for high density SMT
- IR reflow capable
- Tight stability option available
- Seam sealed package

APPLICATIONS:

- CCD clock for VTR camera
- Equipment connected to PC or PC cards
- Laptop
- Mobile communication
- Bluetooth
- Wireless LAN
- Flat TV

STANDARD SPECIFICATIONS:

PARAMETERS

ABRACON P/N	ASE3 Series
Frequency Range	0.625 ~ 133 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)	1.8 Vdc ± 5%
Input Current	See Table 1
Symmetry	45/55% @ 50%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*Vdd) or open: Oscillation "0" (VIL < 0.3*Vdd) : Hi Z
Peak to Peak Jitter	32ps (Typical)
RMS Jitter	4.5ps (Typical)
Stand-by current:	10µA max.

TABLE 1 - Input Current

Freq. (MHz)	Idd max. (max. mA)	Tr/Tf max (nSec)
~ 30 MHz	4	10 max.
~ 75 MHz	6	10 max.
~ 133 MHz	12	10 max.

OPTIONS & PART IDENTIFICATION:

(Left blank if standard)

ASE3 - Frequency - □ - □ - □

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

Contact ABRACON for wider temperature range.

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

Temp option I, D, E, and -10 to +70C only.

Packaging	
T	Tape and Reel



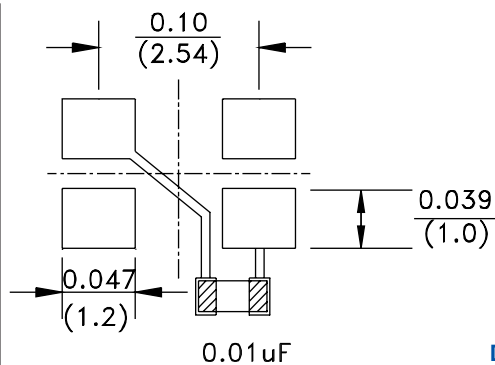
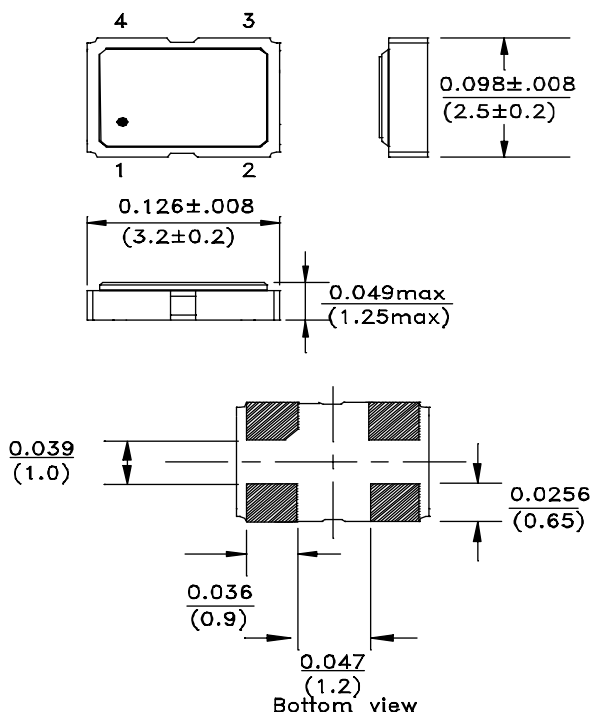
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OUTLINE DRAWING:

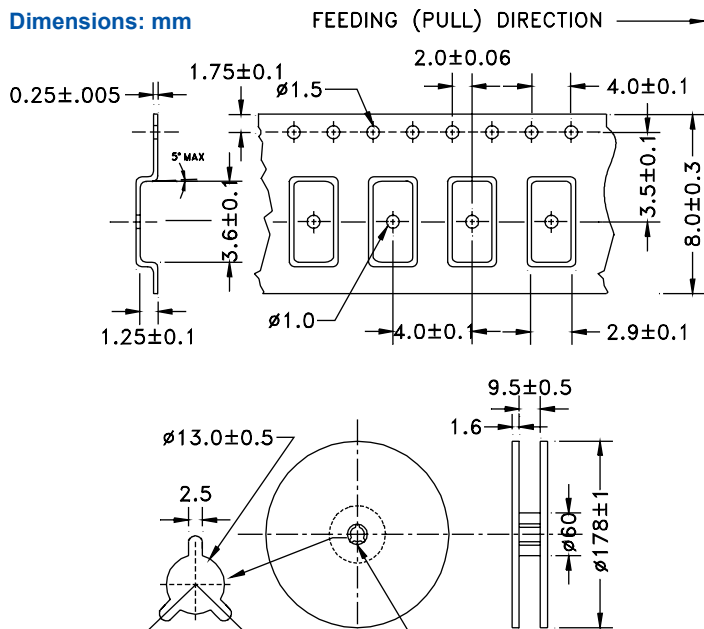


PIN	FUNCTION
1	Tri-State
2	GND/Case
3	Output
4	Vdd

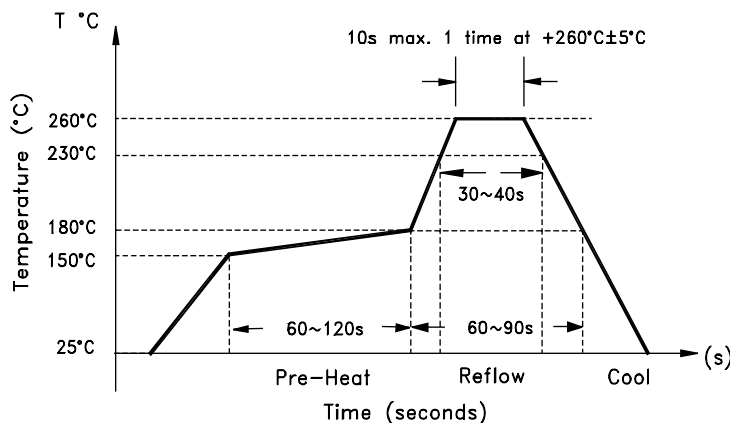
Dimensions: Inches (mm)
It is recommended to use an approximately 0.01μF bypass capacitor between PIN 2 and PIN 4.

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

TAPE & REEL:



REFLOW PROFILE



Need a test socket for the ASE3 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.

ABRACON IS
ISO 9001 / QS 9000
CERTIFIED



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