

1.35Vdc CMOS OUTPUT 3.2 x 2.5 SMD CRYSTAL CLOCK OSCILLATOR



ASE5

3.2 x 2.5 x 0.9 mm



ASE5 SERIES

FEATURES:

- Compact and low profile
- Low current consumption
- Tri-state function
- 1.35Vdc 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
- Computer peripherals
- Digital camera, MP3 player
- Mobile communications
- PDA

STANDARD SPECIFICATIONS:

PARAMETERS

ABRACON P/N	ASE5 Series
Frequency range:	1.0MHz ~ 50 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):	1.35 Vdc ± 5%
Input current	See Table 1
Symmetry:	45/55 % @ 50% Vdd
Rise and fall time (Tr/Tf):	See Table 1
Output load:	CMOS 15 pF max.
Output voltage:	VOH = 0.9 * Vdd min.; VOL = 0.1 * Vdd max.
Tri-state function :	"1" (VIH ≥ 0.7*Vdd) or open: Oscillation; "0" (VIL < 0.3*Vdd) : Hi Z
Disable current:	10µA max.

TABLE 1- Input Current

Frequency (MHz)	Idd mA (Typ)	Idd 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)
0.5 ~ 20	1.2	1.5	1.3	3.0	1.0	2.0	3.3	5.0
20.01 ~ 40.0	1.5	2.0	1.3	3.0	1.0	2.0	3.3	5.0
40.01 ~ 50.0	2.0	2.5	1.3	3.0	1.0	2.0	3.3	5.0

OPTIONS & PART IDENTIFICATION:

(Left blank if standard)

ASE5 - Frequency - □ - □ - □

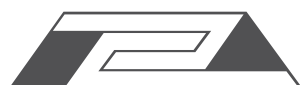
Operating Temp.	
I	0°C to +50°C
D	-10°C to +60°C
E	-20°C to +70°C
F	-30°C to +70°C
N	-30°C to +85°C
L	-40°C to +85°C

Contact ABRACON for wider temperature range.

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

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

Packaging	
T	Tape and Reel



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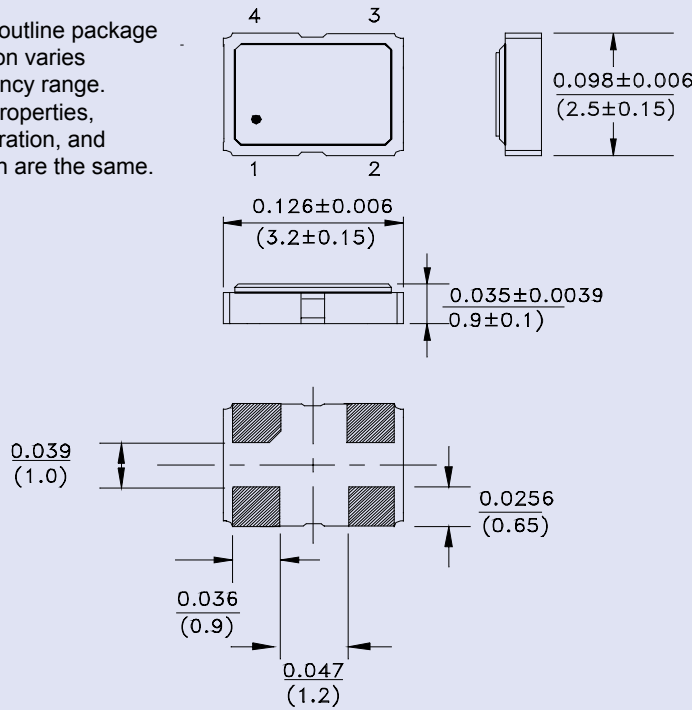
3.2 x 2.5 x 0.9 mm

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OUTLINE DRAWING:

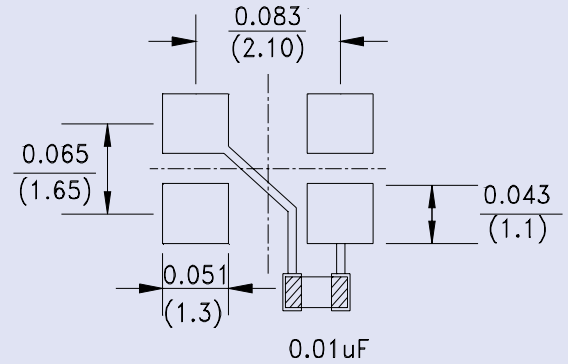
Note: The outline package configuration varies with frequency range. Electrical properties, pin configuration, and land pattern are the same.



Dimension : Inches (mm)

Bottom view

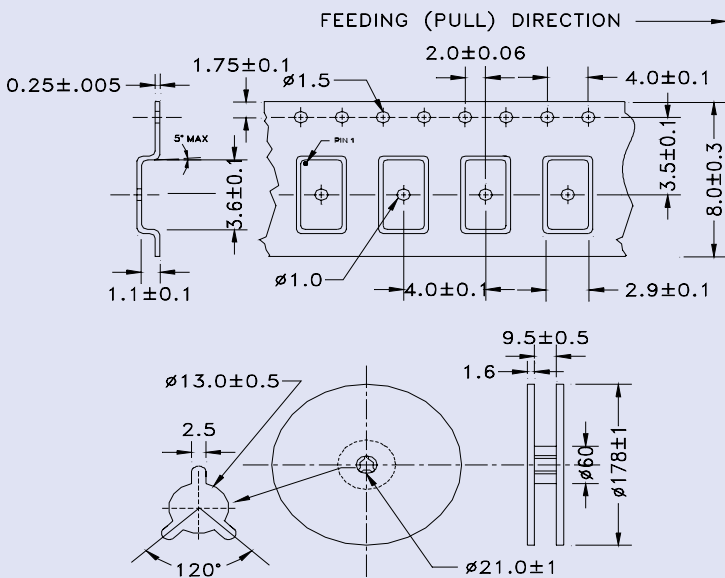
Recommended land pattern



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

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

TAPE & REEL: 1,000 pcs/reel



Dimension: mm

REFLOW PROFILE:

