1.8V CMOS Compatible SMD Crystal Oscillator

ASE3 SERIES

RoHS/RoHS II compliant

Moisture Sensitivity Level (MSL) –1



3.2 x 2.5 x 1.20 mm

FEATURES:

- Compact and low in height
- Tri state
- Low supply voltage
- Suita ble 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	Minimum	Typical	Maximum	Units	Notes
Frequency Range	0.625		133	MHz	
Operating Temperature:	-10		+70	°C	See options
Storage Temperature:	-55		+125	°C	
Overall Frequency Stability:	-100		+100	ppm	See options
Supply Voltage (Vdd):	+1.71	+1.80	+1.89	V	
Supply Current (Idd):		1	4	mA	0.625~9.999MHz
		2	4	mA	10.000~29.999MHz
		3	6	mA	30.000~59.999MHz
		5	10	mA	60.000~74.999MHz
		7	15	mA	75.000~99.999MHz
		12	20	mA	100.000~125.000MHz
Start-up time:		3	5	ms	0.625~9.999MHz
		3	5	ms	10.000~29.999MHz
		3	5	ms	30.000~59.999MHz
		4	10	ms	60.000~74.999MHz
		4	10	ms	75.000~99.999MHz
		4	10	ms	100.000~125.000MHz
Tr/Tf:		5	10	ns	0.625~9.999MHz
		3	6	ns	10.000~29.999MHz
		3	6	ns	30.000~59.999MHz
		2	5	ns	60.000~74.999MHz
		2	5	ns	75.000~99.999MHz
		2	5	ns	100.000~125.000MHz
Symmetry @ 1/2Vdd:	45		55	%	0.625 ~ 89.999 MHz
	40		60		90 ~ 125.0 MHz
Tristate function:	"1" (VIH ≥ 0.7*Vdd) or open: Oscillation				
	"0" (VIL < 0.3*Vdd) : Hi Z				
Output Load:			15	pF	
Output Level	0.9 * Vdd			Vp-p	V_{OH}
			0.1 * Vdd	Vp-p	V_{OL}
Stand-by Current:			10	uA	
Period Jitter (RMS):		3	5	ps	
Aging (first year):	-3		+3	ppm	@+25°C

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tel 949-546-8000 | fax 949-546-8001 | www.abracon.com

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OPTIONS & PART IDENTIFICATION: (Left blank if standard)

ASE3 - [ ] MHz - [ ] - [ ] - [ ]

Frequency in MHz
e.g. 0.625MHz
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.

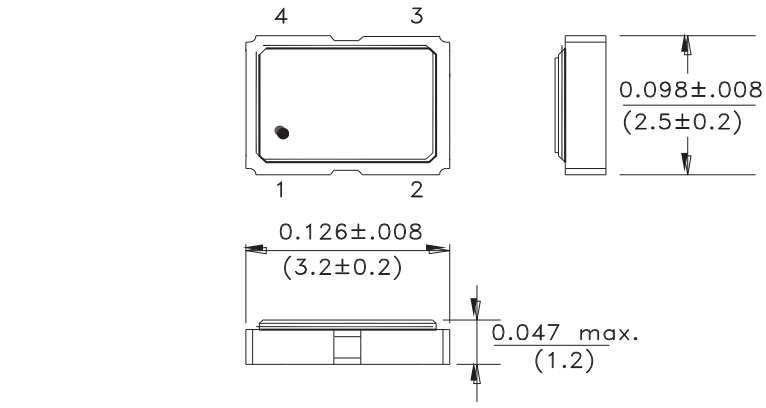
Freq. Stability
J*: ± 20 ppm
R: ± 25 ppm
K: ± 30 ppm
H: ± 35 ppm
B: ± 40 ppm
C: ± 50 ppm

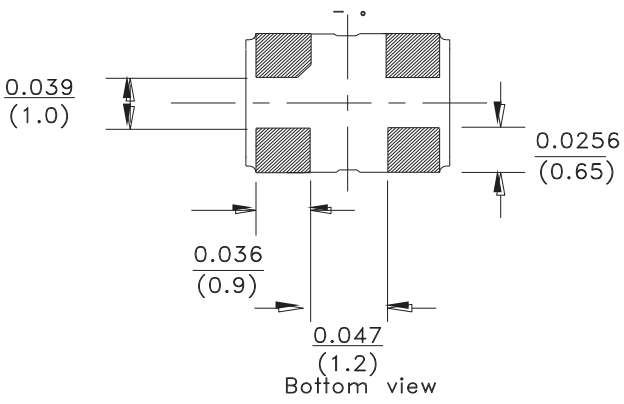
*: Temp options I, D, E, and -10° C to + 70° C only

Packaging
Blank: Bulk
T: Tape & Reel (1kpcs)
T2: Tape & Reel (250pcs)

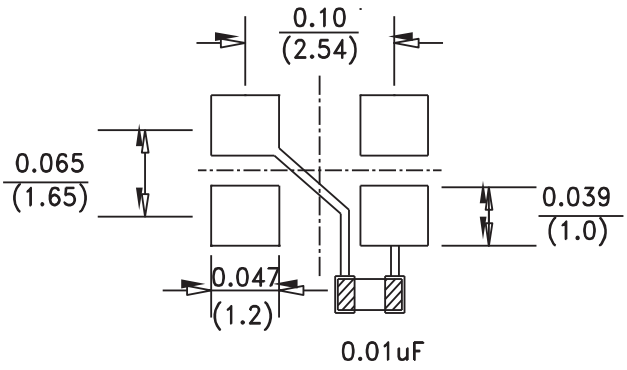
OPTIONS & PART IDENTIFICATION:

(Left blank if standard)





Recommended land pattern



Note: Recommend using an approximately 0.01uF bypass capacitor between Pin 7 and 14.

PIN	FUNCTION
1	Tristate
2	GND/Case
3	Output
4	Vdd

Dimensions: inches (mm)

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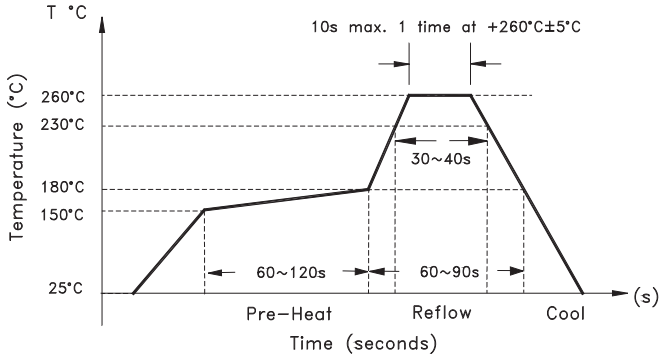
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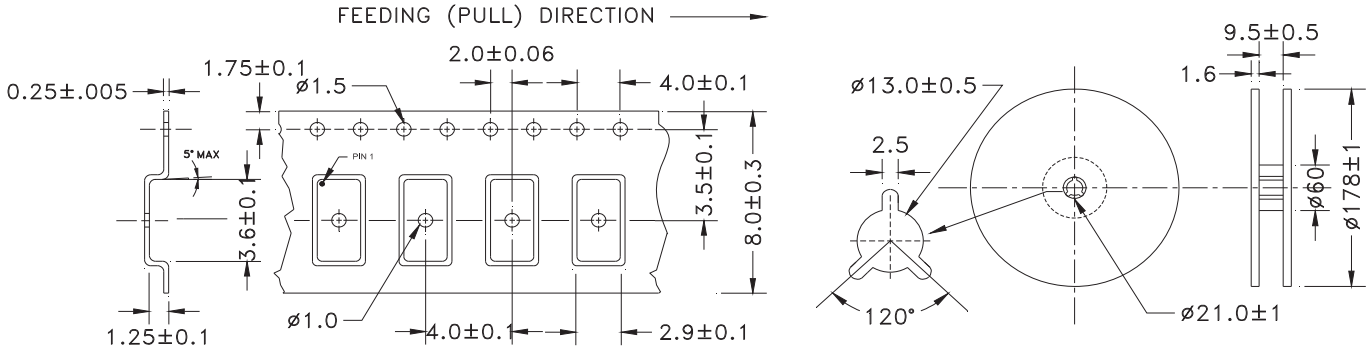
REFLOW PROFILE:



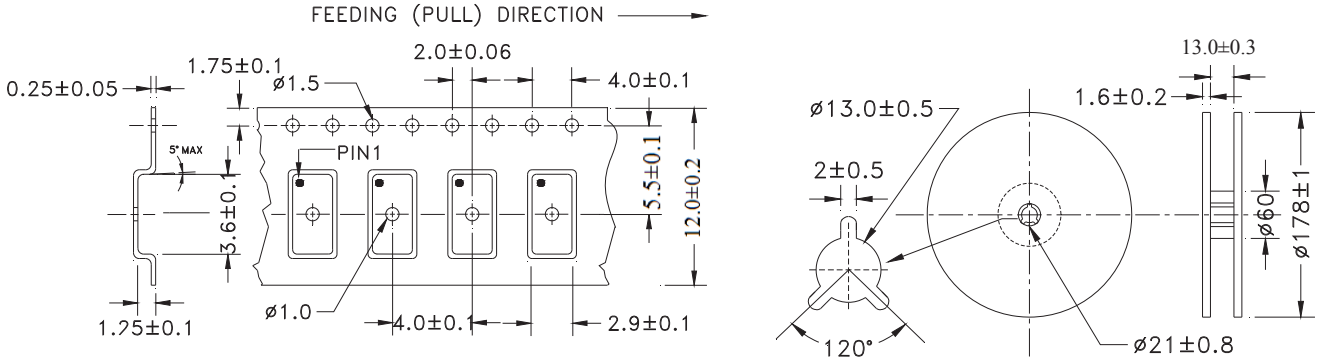
TAPE & REEL:

T: Tape and reel (1,000pcs/reel)
T2: Tape and reel (250pcs/reel)

8mm Tape Width



12mm Tape Width



Dimensions: mm



Need a test socket for the ASE3 Series? To view compatible **PRECISION TEST & BURN-IN SOCKETS** for these parts, **click here.**

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