

1.8V CMOS Compatible SMD Crystal Oscillator



3.2 x 2.5 x 1.20 mm

ASE3 SERIES



RoHS/RoHS II compliant

Moisture Sensitivity Level (MSL) -1

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	Minimum	Typical	Maximum	Units	Notes	
Frequency Range	0.625		133.333	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	100.000~133.333MHz
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	
Tr/Tf:		4	10	ms	100.000~133.333MHz	
		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	
Symmetry @ 1/2Vdd:	45		55	%	0.625 ~ 89.999 MHz	
	40		60		90 ~ 133.333MHz	
		"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	



1.8V CMOS Compatible SMD Crystal Oscillator



3.2 x 2.5 x 1.20 mm

ASE3 SERIES

Pb RoHS/RoHS II compliant

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

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

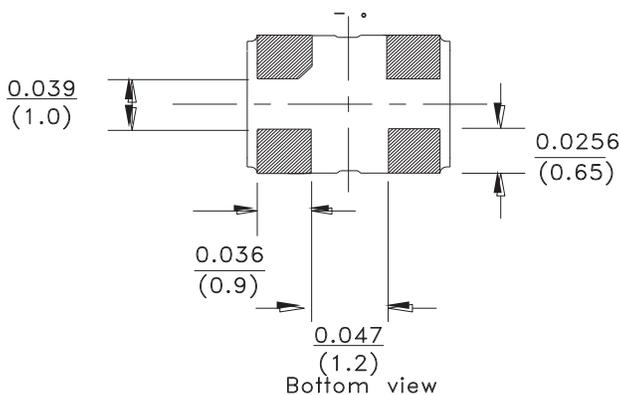
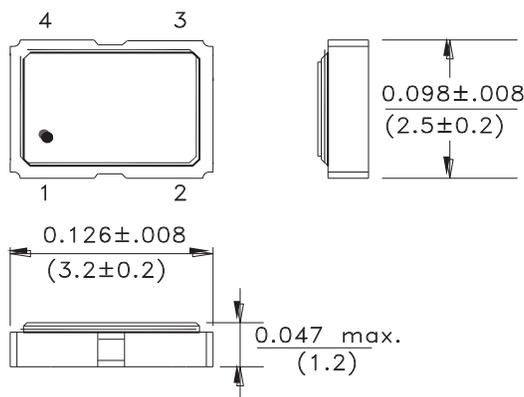
Packaging
Blank: Bulk
T: Tape & Reel (1kpcs)
T2: Tape & Reel (250pcs)

Contact ABRACON for wider temperature range.

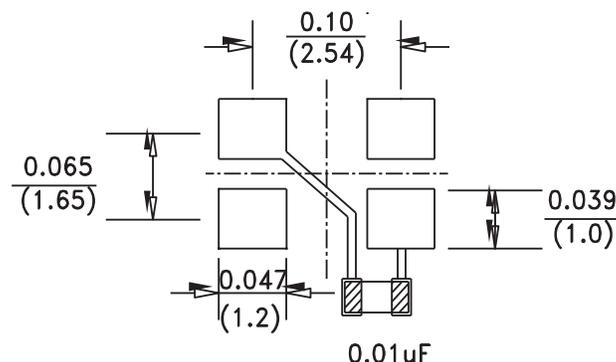
*: Temp options I, D, E, and -10° C to +70° C only

OPTIONS & PART IDENTIFICATION: (Left blank if standard)

(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)

ABRACON IS
ISO 9001:2008
CERTIFIED



Visit www.abracon.com for Terms & Conditions of Sale **Revised: 10.20.21**
30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com

1.8V CMOS Compatible SMD Crystal Oscillator

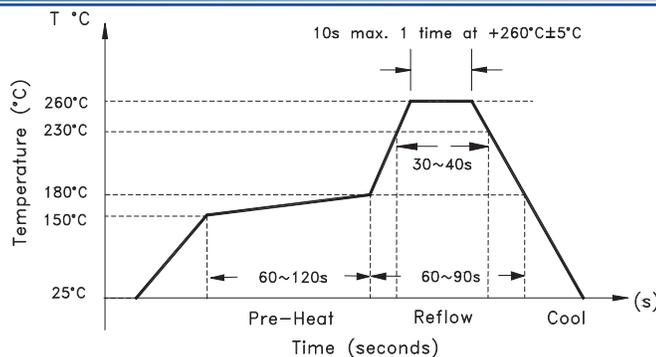


3.2 x 2.5 x 1.20 mm

ASE3 SERIES

Pb RoHS/RoHS II compliant

REFLOW PROFILE:

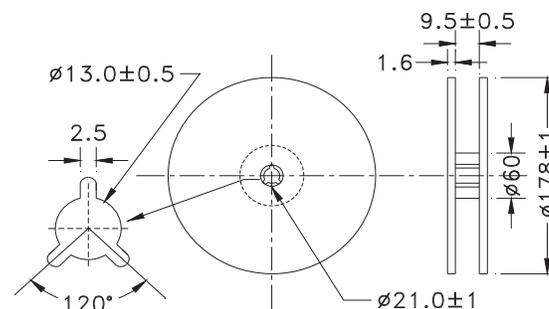
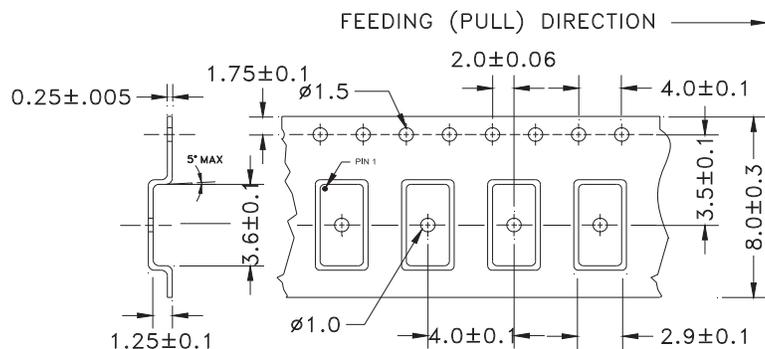


TAPE & REEL:

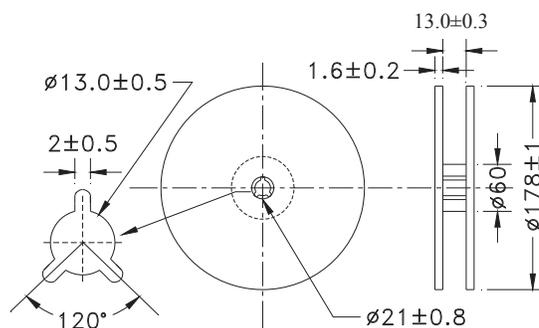
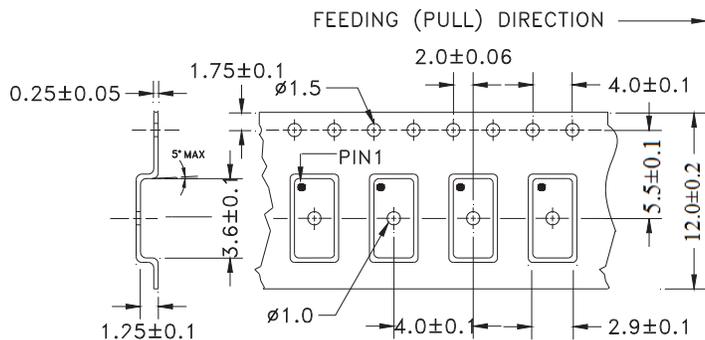
T: Tape and reel (1,000pcs/reel)

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](#).

ATTENTION: Abracon Corporation's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon Corporation is required. Please contact Abracon Corporation for more information.

ABRACON IS
ISO 9001:2008
CERTIFIED



Visit www.abracon.com for Terms & Conditions of Sale **Revised: 10.20.21**
30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[ABRACON:](#)

[ASE3-20.000MHz-KT](#) [ASE3-27.000MHz-KT](#) [ASE3-24.576MHz-KT](#) [ASE3-25.000MHz-KT](#) [ASE3-40.000MHz-KT](#)
[ASE3-29.4912MHz-KT](#) [ASE3-50.000MHz-KT](#) [ASE3-14.31818MHz-KT](#) [ASE3-14.31818MHZ-K-T](#) [ASE3-40.000MHz-K-](#)
[T](#) [ASE3-25.000MHZ-LC-T](#) [ASE3-25.000MHZ-EK-T](#) [ASE3-33.3333MHZ-LC-T](#) [ASE3-64.000MHZ-LR](#) [ASE3-](#)
[12.288MHZ-LK-T](#) [ASE3-26.000MHZ-LR-T](#)