

# SX3KL

## 32.768 kHz SURFACE MOUNT CRYSTAL CLOCK OSCILLATOR

### FEATURES

- Miniature package
- AT-cut crystal built-in
- Low power consumption of 32 µA (typ.)
- Supply voltage as wide as +1.8V to 5.0V
- Applications: Portable electronics, ....

3.2 x 2.5 x 1.2 mm



Item	Specification
Frequency Range	32.768 kHz
Output Logic	CMOS
Frequency stability	± 20 ppm typ. ~ ± 25 ppm max
Operating Temperature Range	-40 ~ +85 °C
Supply Voltage Vdd	+1.8V ±5%      +2.5V ±5%      +3.0V ±5%      +3.3V ±5%      +5.0V ±5%
Supply Current Idd	32 µA typ.
Output Level	VOH ≥ 0.9 Vdd      VOL ≤ 0.1Vdd
Output Load	15 pF
Symmetry	45 / 55 %
Rise Time / Fall Time Fr/Ff	12 ns max.
Tri-state function	pin #1 = high or open      pin #3 ==> oscillation pin #1 = low      pin #3 ==> high impedance
Start-up Time	1 ms typ.
Packing Unit	1000pcs / reel
Soldering Condition	260 °C , 10 sec x2 max

**Customer specifications on request**

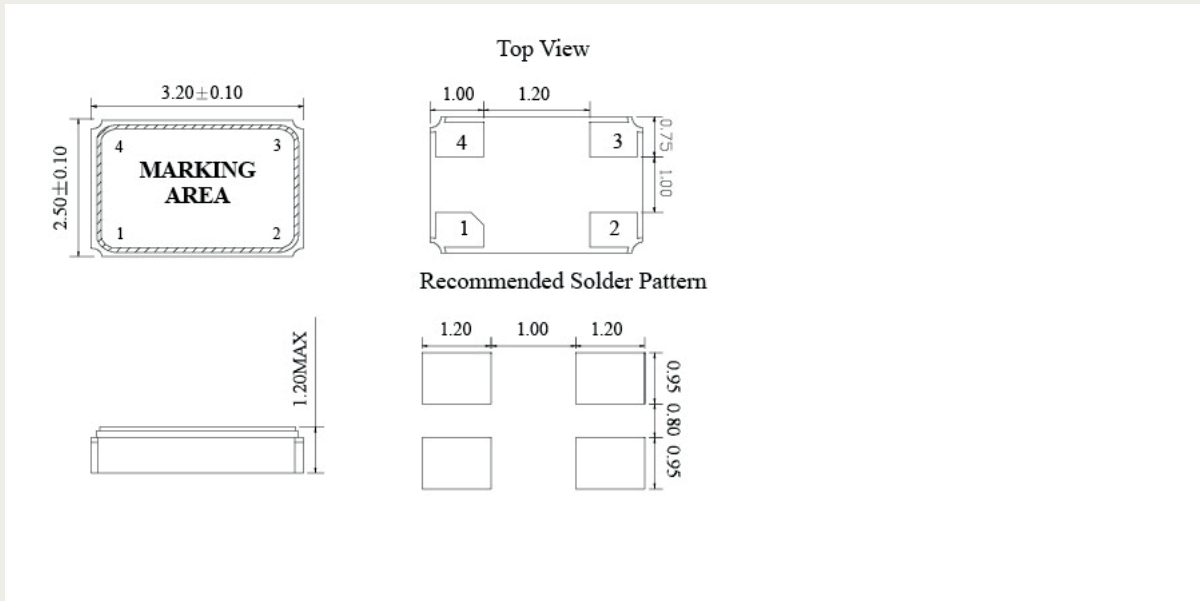
(\*) Includes initial tolerance @+25°C , stability over operating temperature, stability vs. load change, stability vs. supply change and one year aging

### OPTIONS & ORDERING INFORMATION

SX3KL .....	.....	.....	.....	32.768 kHz
Supply Voltage	Operating Temp. *	Overall Stability *	Tri-state Function	Frequency in kHz
<b>18</b> = +1.8V	<b>K</b> = -40° / +85°C	<b>20</b> = ±20 ppm	<b>E</b> = Tri-state	
<b>25</b> = +2.5V		<b>25</b> = ±25 ppm		
<b>30</b> = +3.0V		<b>30</b> = ±30 ppm		
<b>33</b> = +3.3V				
<b>50</b> = +5.0V				

(\*) Note : Not all combinations are possible , please consult us.

# OUTLINE DIMENSIONS



Pin Connections

#1 : E/D

#2 : GND

#3 : Output

#4 : Vdd