

MEMS OSCILLATOR

2.0x1.2MM Surface Mount Package



Approved by:
Checked by:
Issued by:

SPECIFICATION

P/N: SR32768K000XGJM

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ELECTRICAL SPECIFICATIONS

Parameters	Condition\Model	
Fan Out Type		LVC MOS
Supply Voltage		1.2V ~ 3.63V±10%
Frequency		32.768KHz
Operating Temperature		-10℃ ~ +70℃
Input Current	Frequency Range	1.3uA Max
Frequency Stability	All Conditions	±75ppm
Duty Cycle	AT 1/2 Vdd	48/52%
Output Voltage	Vol(max)	10% Vdd
	VoH(min)	90% Vdd
Rise/Fall Time	AT 0.1Vdd~0.9Vdd	200ns Max
Driving Ability	CMOS load max	15pF
Start-up Time	Load RANGE	450ms max
Aging	1 st Year	±1.0ppm
	10 years	±3.5ppm
PAD Connection		PIN#1 N/C PIN#3 OUT
		PIN#2 GND PIN#4 Vdd

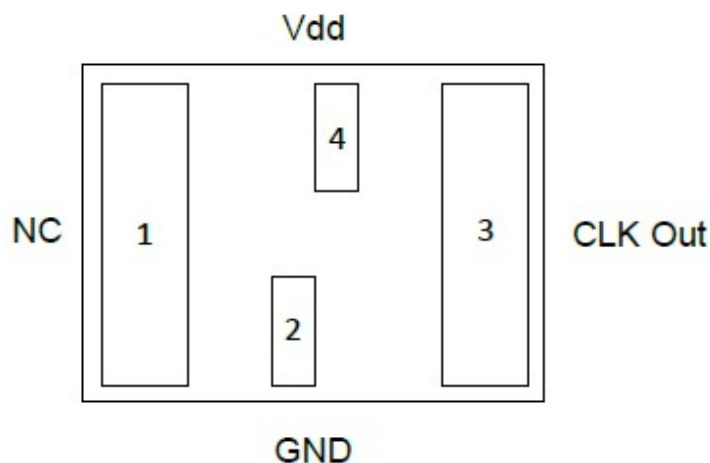
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PIN CONFIGURATION

SMD Package (Top View)



SMD Pin	Symbol	I/O	Functionality
1	NC	No Connect	No Connect. Will not respond to any input signal. When interfacing to an MCU's XTAL input pins, this pin is typically connected to the receiving IC's X Out pin. In this case, the part will not be affected by the signal on this pin. If not interfacing to an XTAL oscillator, leave pin 1 floating (no connect).
2	GND	Power Supply Ground	Connect to ground. All GND pins must be connected to power supply ground.
3	CLK Out	OUT	Oscillator clock output. When interfacing to an MCU's XTAL, the CLK Out is typically connected to the receiving IC's X IN pin. The oscillator output includes an internal driver. As a result, the output swing and operation is not dependent on capacitive loading. This makes the output much more flexible, layout independent, and robust under changing environmental and manufacturing conditions
4	Vdd	Power Supply	Connect to power supply $1.5V \leq Vdd \leq 3.63V$ for operation over $-40^{\circ}C$ to $+85^{\circ}C$ temperature range. Under normal operating conditions, Vdd does not require external bypass/decoupling capacitor(s). Internal power supply filtering will reject more than ± 150 mVpp with frequency components through 10 MHz. Contact SJK for applications that require a wider operating supply voltage range.

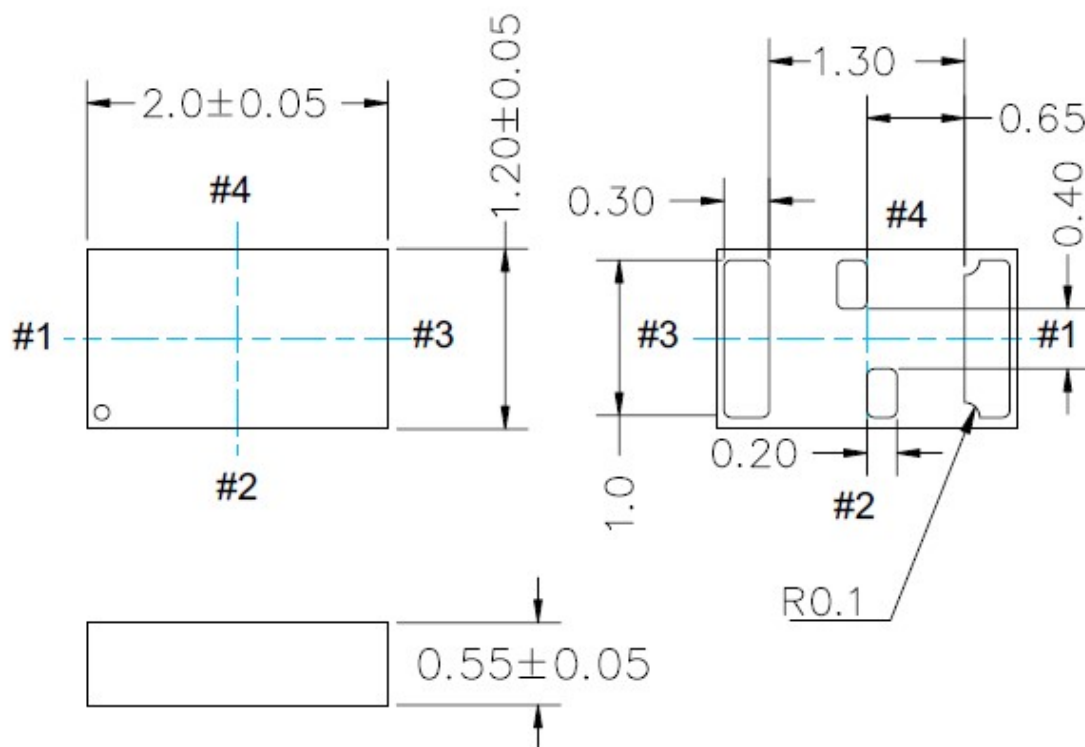
The design, manufacturing process, and specifications of this device are subject to change without notice.

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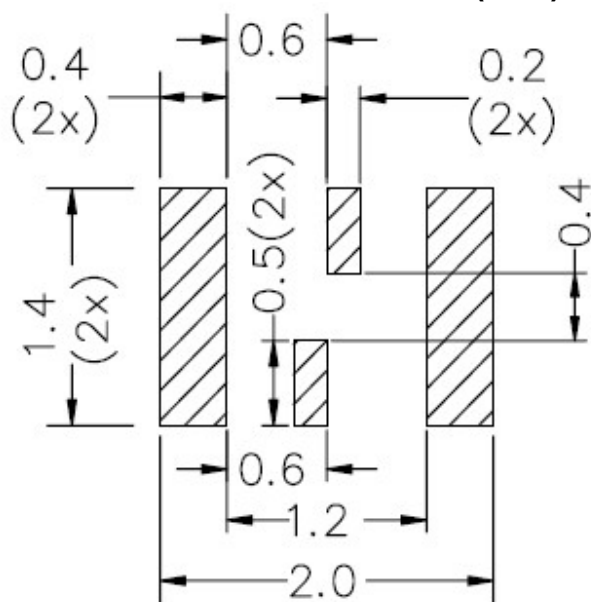
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Dimension (mm)



Recommended Land Pattern (mm)



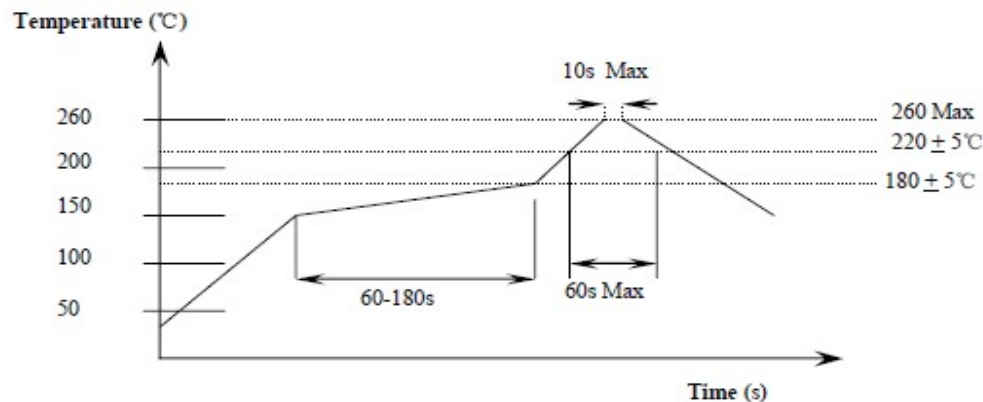
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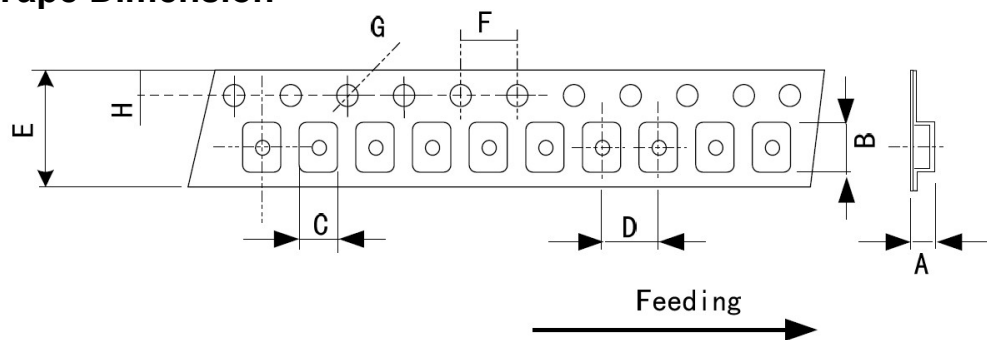
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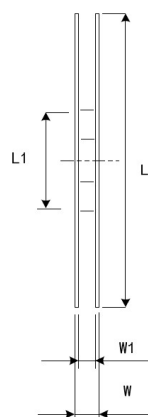
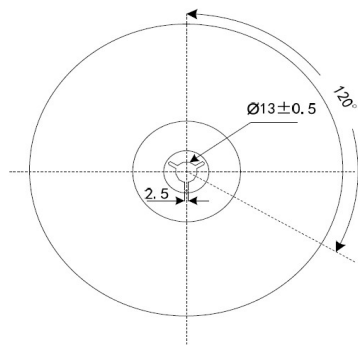
Reflow Soldering Profile



Tape Dimension



	A	B	C	D	E	F	G	H	
DIMENSIONS	0.90 ±0.10	2.30 ±0.10	1.90 ±0.10	4.00 ±0.10	8.00 ±0.20	4.00 ±0.10	1.55 ±0.05	1.75 ±0.10	(UNIT:mm)



	L	L1	W	W1	
DIMENSIONS	178 ±1.00	60.2 ±0.50	11.5 ±0.2	8 +1/-0	Standard Reel Quantity is 3,000 pcs per reel (UNIT:mm)