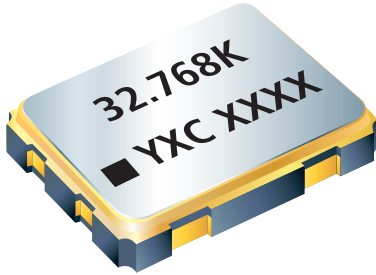




# YSO531SK



## Features

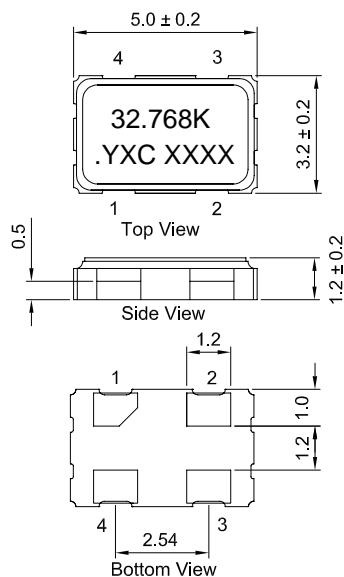


- External dimensions: 5.0 x 3.2 x 1.2 mm.
- Ultra small 32.768 kHz RTC oscillator.
- 4 pads designed to achieve good soldering contact on PCB.
- Use AT crystal as the resonator for good temperature performance.
- Tri-State function available for power saving.
- Applications: Mobile Phone, Tablet, Health and Wellness Monitors, Fitness watches, Sports Video Cams, Wireless keypads.

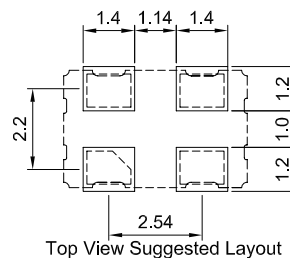
## Electrical Specifications

Item / Type	YSO531SK
Output Frequency Range	32.768KHz
Output Type	CMOS
Supply Voltage	1.8V/2.5V/3.3V, or specify
Oscillation Mode	Fundamental
Frequency Tolerance	± 20ppm, ± 25ppm, or specify
Output Load	15 pF, or specify
Operating Temperature Range	- 20 ~ + 70 °C , - 40 ~ + 85 °C , or specify
Storage Temperature Range	- 40 ~ + 85 °C , - 55 ~ + 125 °C
Voltage Vol ( Max. ) / Vol ( Min. )	90%Vdd min./10%Vdd max
Symmetry	40 ~ 60 % Standard
Rise ( Tr ) / Fall ( Tf ) Time	8 ns Max.
Start-up Time	10 ms Max.
Supply Current	See Below
Frequency Aging ( at 25 °C )	± 3 ppm / year Max.

## Dimensions



引脚	功能	定义
1	E/D	三态 / 无三态
2	GND	接地
3	OUTPUT	输出
4	Vdd	电源电压



Units: mm



# YSO531SK



★ PART NUMBER GUIDE

e.g. O503232768KEEA4SC

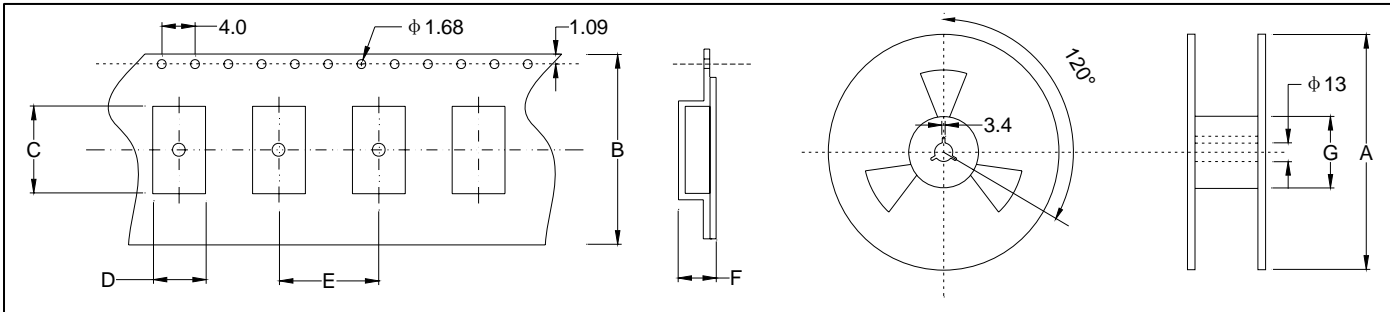
YSO321SK=5.0x3.2 SMD SEAM TYPE

Quartz Crystal Oscillator	Dimensions	Frequency (Hz)	Supply voltage (V)	Frequency Stability Overall (ppm)	output	Pin	Material	Operating Temp. Range
O	5032	32768K	E	E	A	4	S	C

★ INPUT CURRENT

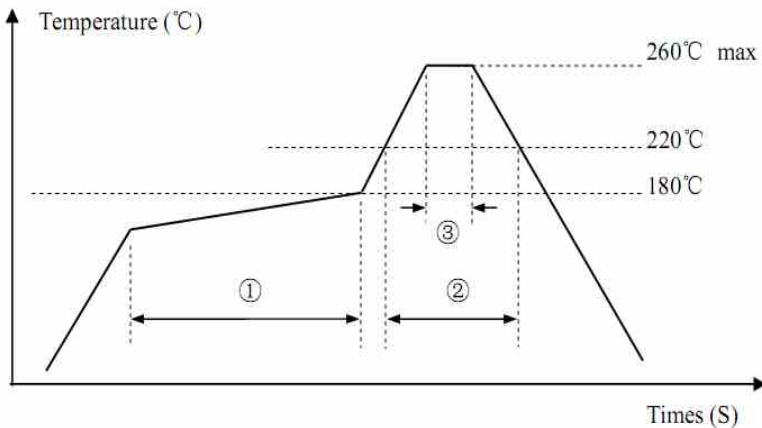
<b>Vdc=1.8~3.3V</b>	
<b>15pF only</b>	
32.768KHz	0.5mA max

★ TAPING SPECIFICATION (Unit: mm)



	A	B	C	D	E	F	G
OSC-SMD5032	178±2.0	12.2±0.3	5.95±0.15	4.20±0.15	7.76±0.1	1.49±0.1	62.5±1.0
1000 pcs per reel							

★ REFLOW SOLDERING PROFILE



Pb free reflow	①	Preheat	160~180°C	120sec. max
A	②	Primary heat	220°C	60sec. max
	③	Peak	260°C	10sec. max.

★ Test Circuit

