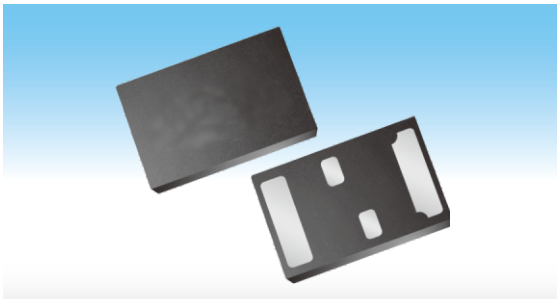
MEMS Oscillator-32.768kHz MEMS Oscillator

SJK1532/SJK1630 32.768kHz MEMS Oscillator | 32.768kHz | Output: CMOS | Package: 1508/2012



Features

- Any frequency from 1MHz~110MHz(SJK8918), 115MHz~137MHz (SJK8919), accurate to 6 decimal places
- Low power consumption of 3.5mA typical at 1.8V
- LVCMOS /LVTTL compliant output
- Excellent total frequency stability: ±20ppm
- Operating temperature: -40~+125°C, for AEC-Q100 oscillators
- Application for industrial, Medical, Industrial sensors, Motor sevro, PLC, Asset tracking system, High temperature applications, etc
- RoHS Compliant /Pb Free

Standard Specifications

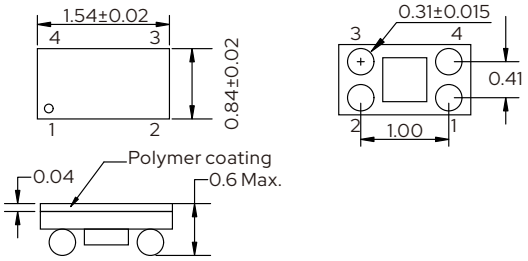
Item \ Type	SJK1532 32.768kHz MEMS Oscillator	SJK1630 32.768kHz MEMS Oscillator
Output Type	LVCMOS /NanoDrive	LVCMOS
Load condition	15pF	15pF
Frequency Range	32.768kHz	32.768kHz / 16.384kHz
Supply Voltage	1.2V~3.63V(-10~+70°C), 1.5V~3.63V(-40~+85°C)	1.5V~3.63V
Frequency Tolerance(@25°C)	±10ppm, ±20ppm	±20ppm
Frequency Stability	±75ppm~±250ppm	±75ppm~±150ppm
Aging (@ 25°C)(@ 1st year)	±1ppm max.	
Operating Current	1.4μA max.	2.8μA max.
Power-Supply Ramp	100ms max.	
Start-up Time at Power-up	450ms max.	450ms max.(-40~+85°C), 500+1 period(-55~+105°C)
Output Stage Operating Current	0.0125μA/Vpp	/
LVCMOS Output Option, T_A=-40°C~+85°C, Typical Values Are at T_A:25°C		
Output Rise/Fall Time	200ns max.(@ Load:15pF), 50ns max. (@ Load:5pF)	200ns max.
Output Clock Duty Cycle	48~52%	
Output Voltage High(VOH)	0.9×Vcc min.	
Output Voltage Low (VOL)	0.1×Vcc max.	
Maximum Output Drive	/	50pF
NanoDrive Programmable, Reduced Swing Output		
Output Rise/Fall Time	200ns max.	
Output Clock Duty Cycle	48~52%	
AC-Coupled Programmable Output Swing ($V_{\_SW}$)	0.20~0.80V	
DC-Biased Programmable Output Voltage High Range (V_{OH})	0.60~1.225V	
DC-Biased Programmable Output Voltage Low Range (V_{OL})	0.35~0.8V	
Programmable Output Voltage Swing Tolerance	-0.055~0.055V	
Jitter, Temperature, Dimension, Footprint		
Period Jitter	35ns max.	
Operating Temperature	-10~+70°C, -40~+85°C	-10~+70°C, -40~+85°C, -40~+105°C -55~+85°C, -55~+105°C
Storage Temperature	-65~+150°C	
Package Size (L×W×H) (Unit: mm)	1.5×0.8×0.6	2.0×1.2×0.6
Footprint Package	4-Pin Package	

MEMS Oscillator-Dimensions

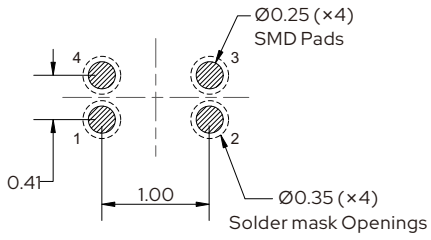
MEMS Oscillator Dimensions

Package Size - Dimensions (Unit:mm)	Recommended Land Pattern (Unit: mm)

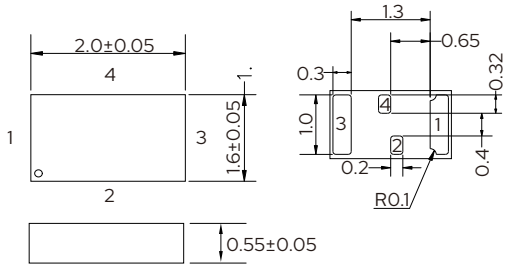
SJK1532 For 1.5×0.8



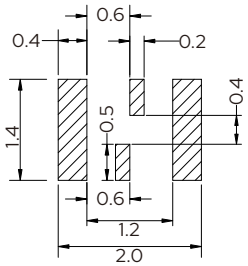
Pin No.	Function
1	NC/ST/GND
2	Output
3	Vcc
4	GND



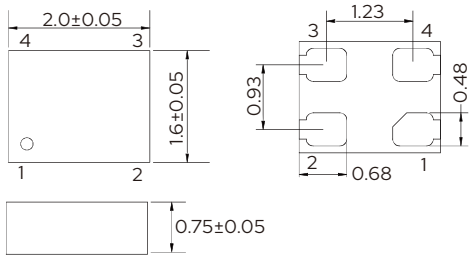
SJK1630 For 2.0×1.2



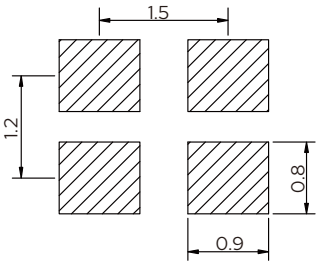
Pin No.	Function
1	NC
2	GND
3	Output
4	Vcc



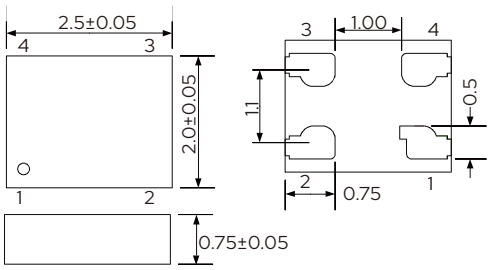
SJK8008 SJK8009 SJK9005 SJK8918 SJK8919 For 2.0×1.6



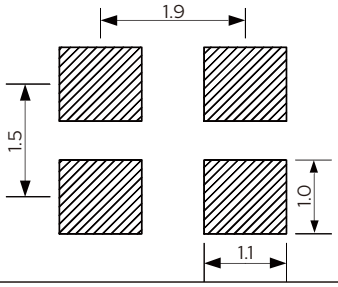
Pin No.	Function
1	OE/ST/NC
2	GND
3	Output
4	Vcc



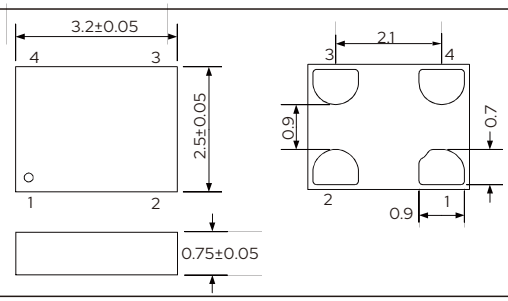
SJK8008 SJK8009 SJK8208 SJK8209 SJK9005 SJK8918 SJK8919 For 2.5×2.0



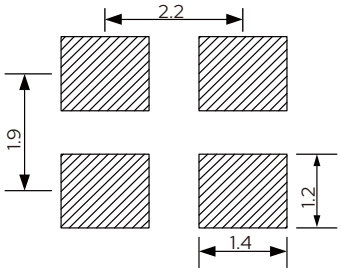
Pin No.	Function
1	OE/ST/NC
2	GND
3	Output
4	Vcc



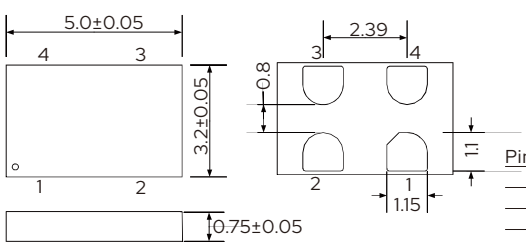
SJK8008 SJK8009 SJK8208 SJK8209 SJK9005 SJK8918 SJK8919 For 3.2×2.5



Pin No.	Function
1	OE/ST/NC
2	GND
3	Output
4	Vcc



SJK8008 SJK8009 SJK8208 SJK8209 SJK8918 SJK8919 For 5.0×3.2



Pin No.	Function
1	OE/ST/NC
2	GND
3	Output
4	Vcc