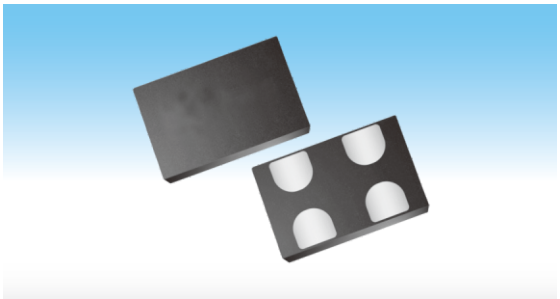
MEMS Oscillator-Ultra Performance

SJK8208/SJK8209 Ultra-Performance MEMS Oscillator 1MHz~220MHz Output: CMOS Package: 2520~7050



Features

- Any frequency from 1MHz~80MHz(SJK8208), 80MHz~220MHz (SJK8209), accurate to 6 decimal places
- Low power consumption of 3.5mA typical at 1.8V
- LVCMOS /LVTTL compliant output
- Excellent total frequency stability: ±10ppm
- Ultra low phase jitter: 0.5ps (12KHz~20MHz)
- Application for ethernet, SATA, SAS, SONET, PCI Express, Video, Wireless, PC, Storage, Network, Telecom, Industrial control, etc
- RoHS Compliant /Pb Free

Standard Specifications

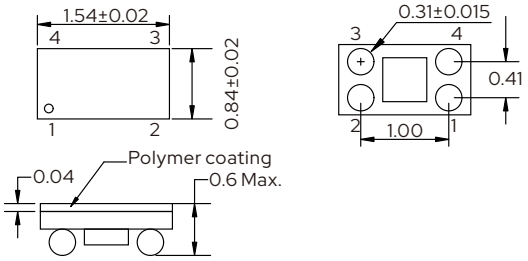
Item \ Type	SJK8208 Ultra-Performance MEMS Oscillator	SJK8209 Ultra-Performance MEMS Oscillator
Output Type	LVCMOS /LVTTL	
Load condition	15pF	
Frequency Range	1MHz~80MHz	80MHz~220MHz
Supply Voltage	1.8V, 2.5V, 2.8V, 3.3V	
Frequency Stability (All Condition)	±10ppm,±20ppm, ±25ppm, ±50ppm	
Current Consumption	33mA max.	36mA max.
OE Disable Current	31mA max.	
Stand-by Current	70μA max.	
Symmetry	45~55%	
0 Level Output Voltage (V_{OL})	0.1×Vcc max.	
1 Level Output Voltage (V_{OH})	0.9×Vcc min.	
Rise Time / Fall Time	2.0ns max.	
OE Pin 0 Level Input Voltage (V_{IL})	0.3×Vcc max.	
OE Pin 1 Level Input Voltage (V_{IH})	0.7×Vcc min.	
Input Pull-up Impedance	50~150KΩ (Pin1 OE or ST logic high)	
	2MΩ min. (Pin1 ST logic low)	
Start-up Time	10ms max.	
Enable/Disable Time	150ns max.	115ns max.
Resume Time	10ms max.	
RMS Period Jitter	3ps max.	
RMS Phase Jitter (12KHz~20MHz)	0.5ps Typical	
First Year Aging (@25°C)	±1.5ppm max.	
10-Year Aging (@25°C)	±5ppm max.	
Operating Temperature Range	-20~+70°C, -40~+85°C	
Storage Temperature Range	-65~+150°C	
Package Size (L×W×H) (Unit: mm)	2.5×2.0×0.8, 3.2×2.5×0.8, 5.0×3.2×0.8, 7.0×5.0×1.0	
Footprint Package	4-Pin Package	

MEMS Oscillator-Dimensions

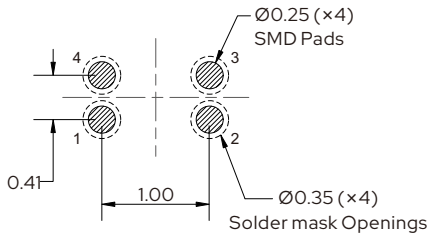
MEMS Oscillator Dimensions

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

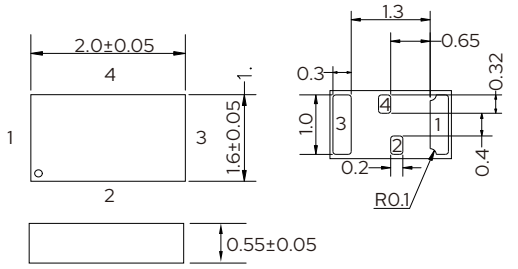
SJK1532 For 1.5×0.8



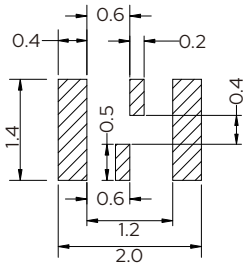
Pin No.	Function
1	NC/ST/GND
2	Output
3	Vcc
4	GND



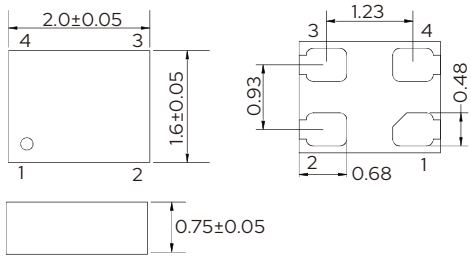
SJK1630 For 2.0×1.2



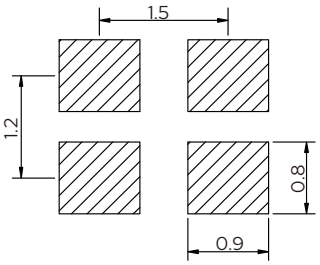
Pin No.	Function
1	NC
2	GND
3	Output
4	Vcc



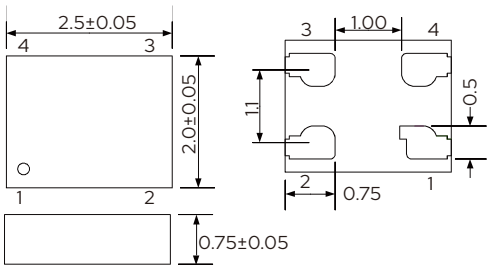
SJK8008 SJK8009 SJK9005 SJK8918 SJK8919 For 2.0×1.6



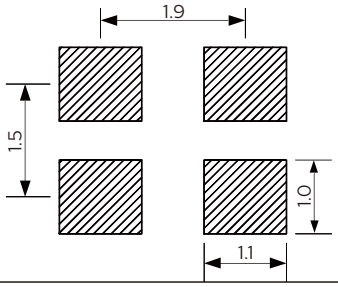
Pin No.	Function
1	OE/ST/NC
2	GND
3	Output
4	Vcc



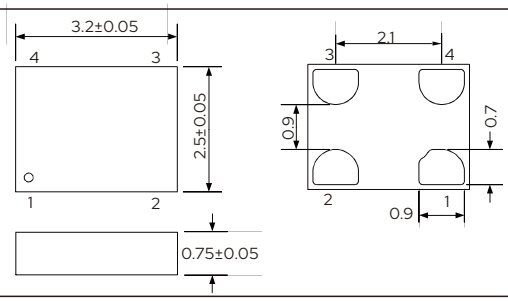
SJK8008 SJK8009 SJK8208 SJK8209 SJK9005 SJK8918 SJK8919 For 2.5×2.0



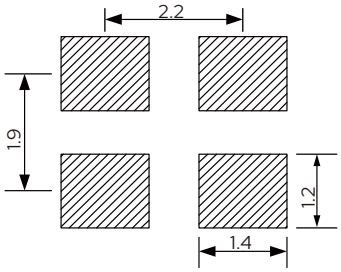
Pin No.	Function
1	OE/ST/NC
2	GND
3	Output
4	Vcc



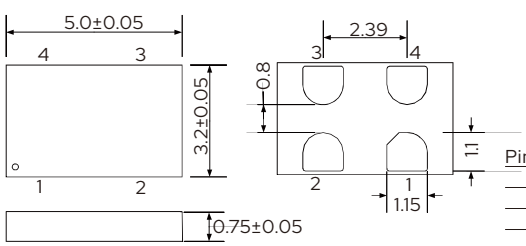
SJK8008 SJK8009 SJK8208 SJK8209 SJK9005 SJK8918 SJK8919 For 3.2×2.5



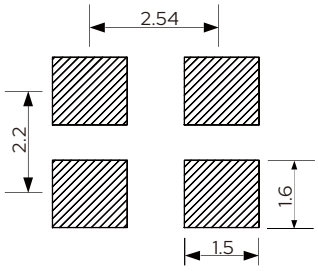
Pin No.	Function
1	OE/ST/NC
2	GND
3	Output
4	Vcc



SJK8008 SJK8009 SJK8208 SJK8209 SJK8918 SJK8919 For 5.0×3.2



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

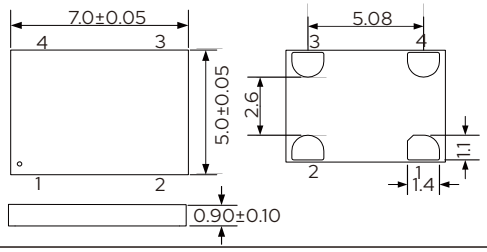


MEMS Oscillator-Dimensions

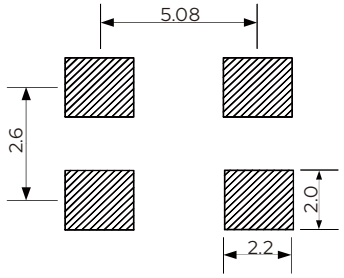
MEMS Oscillator Dimensions

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

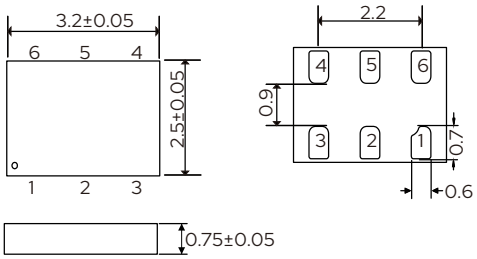
SJK8008 SJK8009 SJK8208 SJK8209 SJK8918 SJK8919 For 7.0×5.0



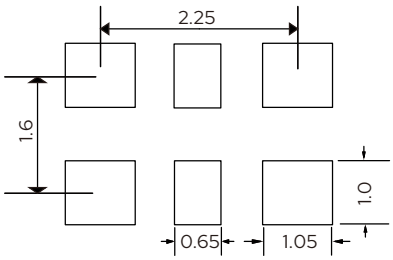
Pin No.	Function
1	OE/ST/NC
2	GND
3	Output
4	Vcc



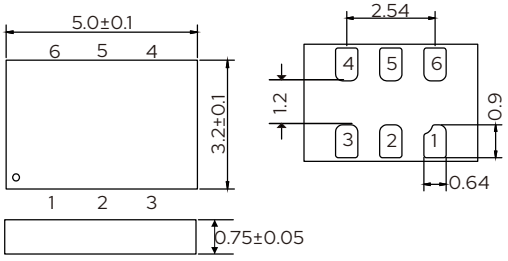
SJK9121 SJK9122 For 3.2×2.5



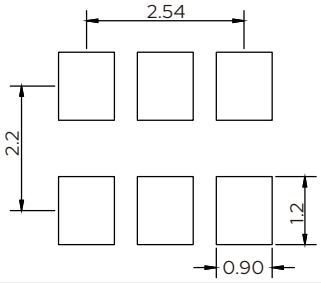
Pin No.	Function
1	OE/ST/NC
2	NC
3	GND
4	Output+
5	Output-
6	Vcc



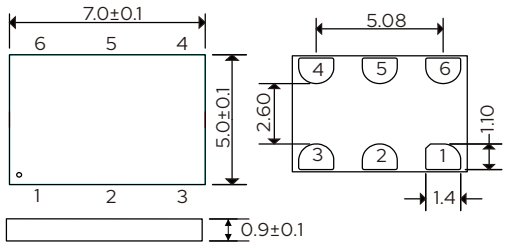
SJK9121 SJK9122 For 5.0×3.2



Pin No.	Function
1	OE/ST/NC
2	NC
3	GND
4	Output+
5	Output-
6	Vcc



SJK9121 SJK9122 For 7.0×5.0



Pin No.	Function
1	OE/ST/NC
2	NC
3	GND
4	Output+
5	Output-
6	Vcc