

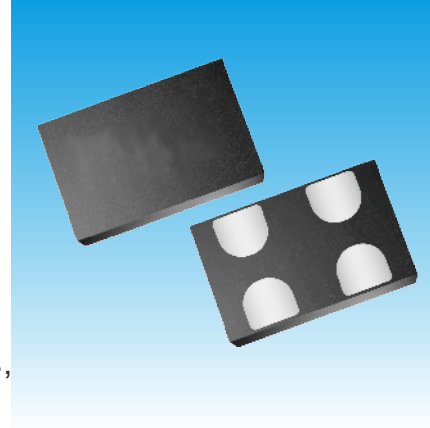
# SJK8918 High Temperature MHz MEMS Oscillator



High Temperature MHz MEMS Oscillator Output Frequency: 1~110MHz

## Features

- Output frequency range from 1MHz to 110MHz
- Excellent total frequency stability as low as  $\pm 20$  ppm
- Operating temperature from  $-40^{\circ}\text{C}$  to  $125^{\circ}\text{C}$
- Supply voltage of 1.8V or 2.5V to 3.3V
- Low power consumption of 3.5 mA typical
- LVCMOS/LVTTL compatible output
- Size with 2.0×1.6, 2.5×2.0, 3.2×2.5, 5.0×3.2, 7.0×5.0 mm×mm
- Automatic mounting and reflow soldering
- Applications: GPON/EPON, Network switches, Routers, Server, Embedded systems, etc
- RoHS Compliant /Pb Free

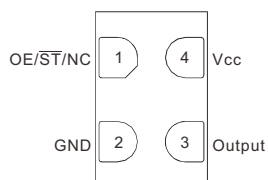


## Standard Specification

Item /Type	SJK8918
Output Type	LVCMOS/HCMOS
Frequency Range	1~110MHz
Supply Voltage	1.8V~3.3V
Frequency Stability	$\pm 20\text{ppm} \sim \pm 50\text{ppm}$ , or specify
Current Consumption	4.7mA Max.
Standby Current	8.5mA Max.
OE Disable Current	4.5mA Max.
Operating Temperature	$-40 \sim +105^{\circ}\text{C}$ / $-40 \sim +125^{\circ}\text{C}$
Duty Cycle	45~55%
Rise/Fall Time	2.5ns Max.
Voltage Vol (Max.)/Voh (Min.)	10% Vcc/90%Vcc
Voltage Vil (Max.)/Vih (Min.)	30% Vcc/70% Vcc
Input Pull-up Impedance	150K $\Omega$ Max. (Pin1 Logic High)
	2M $\Omega$ Min. (Pin1 Logic Low)
Start-up Time	5ms Max.
Enable/Disable Time	130ns Max.
Resume Time	5ms Max.
RMS Period Jitter	3pS Max
Peak to Peak Period Jitter	25pS Max.
RMS Phase Jitter (12KHz~20MHz)	2pS Max.
Storage Temperature	$-65 \sim +150^{\circ}\text{C}$
Packing Unit	2016, 2520, 3225 size
	5032, 7050 size
	3000pcs.Reel
	1000pcs.Reel

## Pin Functions

Top View

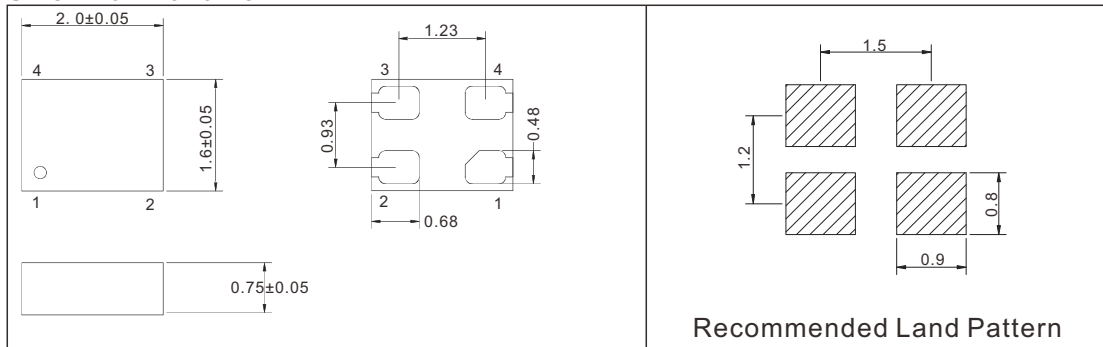


### Pin Connections

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

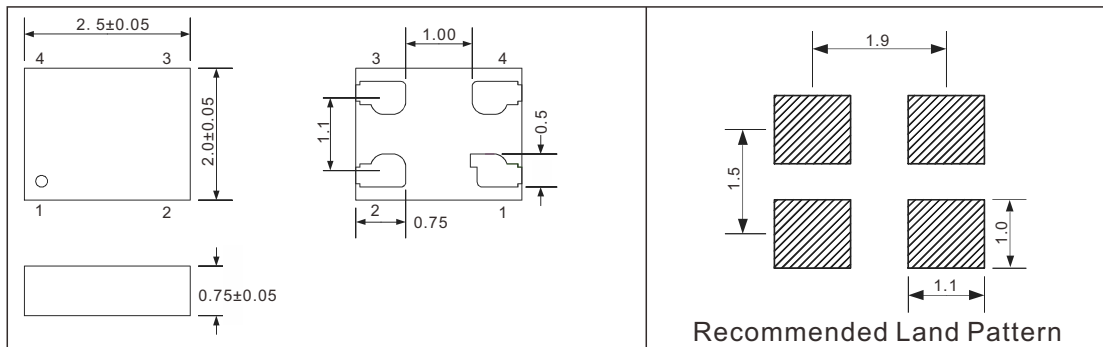
### Dimensions [mm]

#### Size: 2.0×1.6×0.75 mm



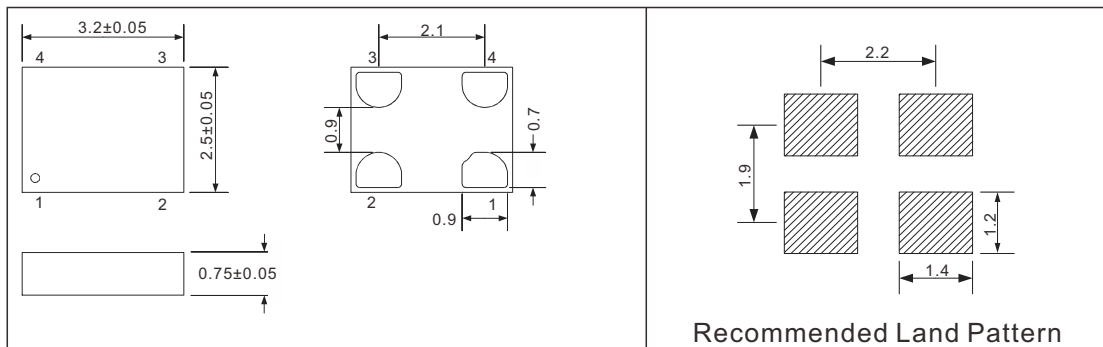
Recommended Land Pattern

#### Size: 2.5×2.0×0.75 mm



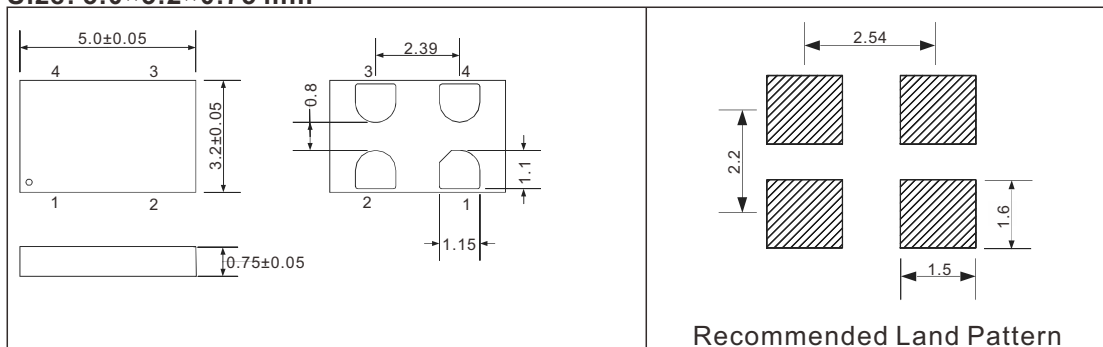
Recommended Land Pattern

#### Size: 3.2×2.5×0.75 mm



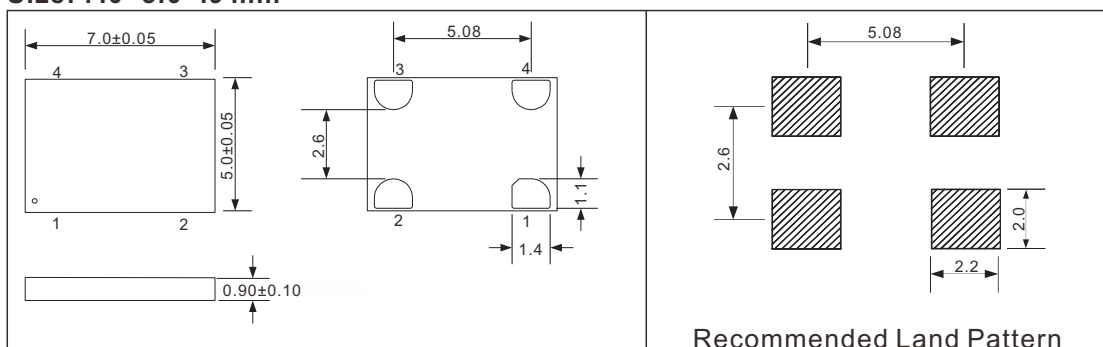
Recommended Land Pattern

#### Size: 5.0×3.2×0.75 mm



Recommended Land Pattern

#### Size: 7.0×5.0×0.9 mm



Recommended Land Pattern