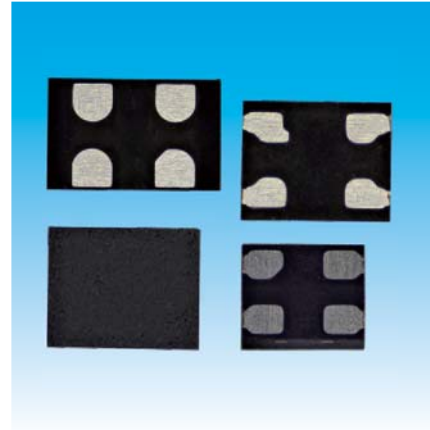


### Features

- Any frequency between 1 and 141 MHz accurate to 6 decimal places
- Excellent total frequency stability as low as  $\pm 20\text{ppm}$
- Ultra low phase jitter: 0.5ps (12 kHz~20 MHz)
- Low power consumption of 4.0mA typical at 1.8V
- Pin1 modes: Standby, output enable, or spread disable
- LVCMOS output
- Spread spectrum for EMI reduction
  - Wide spread % option
    - Center spread: from  $\pm 0.125\%$  to  $\pm 2\%$ ,  $\pm 0.125\%$  step size
    - Down spread:  $-0.25\%$  to  $-4\%$  with  $-0.25\%$  step size
  - Spread profile option: Triangular, Hershey-kiss
- Programmable rise/fall time for EMI reduction: 8 options, 0.25 to 40 ns
- Size with  $2.0 \times 1.6$ ,  $2.5 \times 2.0$ ,  $3.2 \times 2.5 \text{ mm}^2$
- Applications: IP camera, Industrial motors, PCI-Express, Flat panels, Printers, et.
- RoHS Compliant /Pb Free

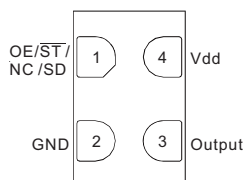


### Standard Specification

Item /Type	SJK9005
Output Type	LVCMOS
Frequency Range	1~141MHz
Supply Voltage	1.8V~3.3V
Frequency Stability	$\pm 20\text{ppm} \sim \pm 50\text{ppm}$
Current Consumption	6.5mA Max.
Standby Current	4.3 $\mu\text{A}$ Max.
OE Disable Current	6.5mA Max.
Operating Temperature	$-20 \sim +70^\circ\text{C}$ / $-40 \sim +85^\circ\text{C}$
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. (Pin 1, OE logic high/logic low, or $\overline{\text{ST}}$ logic high) 2M $\Omega$ Min. (Pin 1, $\overline{\text{ST}}$ logic low)
Start-up Time	5ms Max.
Enable/Disable Time	180ns Max.
Resume Time	5ms Max.
Spread Enable Time	4 $\mu\text{s}$ Max
Spread Disable Time	50 $\mu\text{s}$ Max.
Cycle-to-cycle jitter	22ps Max.
Storage Temperature	$-65 \sim +150^\circ\text{C}$
Packing Unit	2016, 2520, 3225 size 3000pcs.Reel

### Pin Functions

Top View

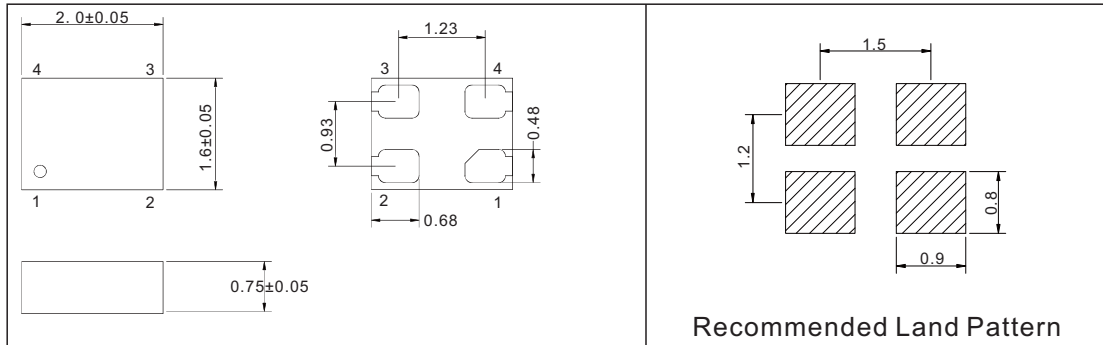


### Pin Connections

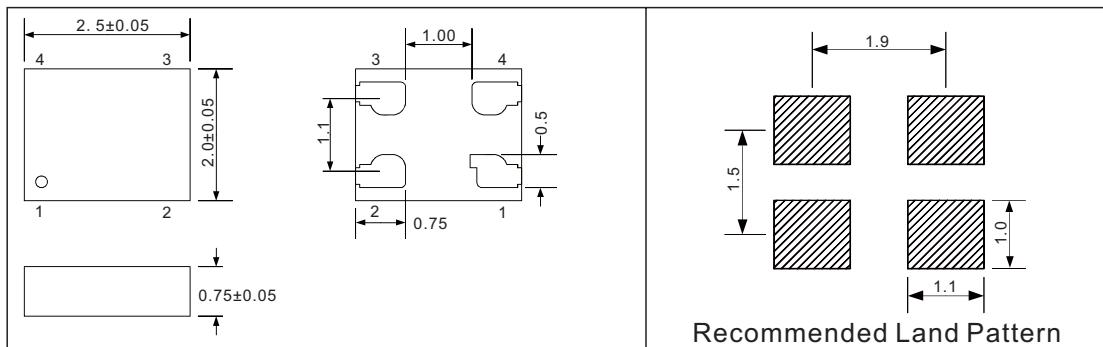
Pin No.	Connection	Functionality
1	OE Output Enable	H:specified frequency output L: Output is high impedance
	$\overline{\text{ST}}$ Standby	H:specified frequency output L: Output is low
	NC No Connect	Pin1 no function
	SD Spread Disable	H: Spread = ON L: Spread = OFF
2	GND	Electrical ground
3	Output	Oscillator output
4	Vdd	Power supply voltage

### Dimensions [mm]

#### Size: 2.0×1.6×0.75 mm



#### Size: 2.5×2.0×0.75 mm



#### Size: 3.2×2.5×0.75 mm

