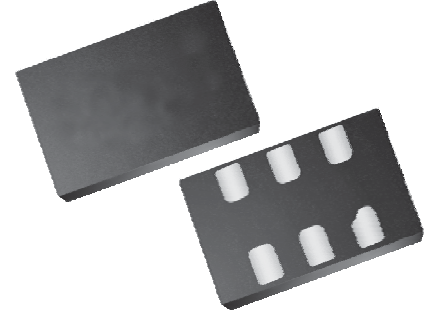


Differential MEMS MHz Oscillators

| | | | | | |
|--|--------------|----------------|--------------|----------------|-----------------|
| SMD Type | Output | Best Stability | Phase Jitter | Supply Voltage | Frequency Range |
| SJK9121 / SJK9122 [3.2×2.5, 5.0×3.2, 7.0×5.0 mm] | LVPECL /LVDS | 10 ppm | 0.6ps | 2.5V / 3.3V | 1 MHz~625 MHz |

Features

- Standard 6-pin packages: 3. 2×2.5 (3225), 5.0×3.2 (5032), 7.0×5.0 (7050), mm×mm
- LVPECL or LVDS output signaling types, any frequency between 1 and 625MHz accuracy to 6 decimal places
- 0.6ps RMS phase jitter over 12KHz to 20MHz bandwidth
- Excellent total frequency stability as low as ±10ppm
- Supply voltage: 2.5V, 3.3V
- RoHS and REACH Compliant, Pb-Free
- Low power consumption 4.0mA typical at 1.8V
- Applications: 10GB ethernet, SONET, SATA, SAS, Fibre channel, PCI-express, Telecom, Instrumentation, Storage, Serve, etc.



Standard Specifications

| Item / Type | SJK9121 | SJK9122 |
|--|---|-----------------|
| Dimensions | 3.2×2.5×0.75, 5.0×3.2×0.75, 7.0×5.0×0.90 mm | |
| Output frequency range | 1 MHz~220 MHz | 220 MHz~625 MHz |
| Frequency stability | ±10ppm, ±20ppm, ±25ppm, ±50ppm | |
| Supply voltage | 2.5V, 3.3V, 2.25V~3.63V | |
| Operating Temperature | -20°C~+70°C, -40°C~+85 | |
| Input voltage Vih /Vil | 70% Vdd min. /30% Vdd max. | |
| Input pull-up impedance | 2 MΩ min. | |
| Start-up time | 10ms max. | |
| Duty cycle | 45~55% | |
| LVPECL, DC and AC Characteristics | | |
| Current consumption | 69mA max. | |
| OE disable supply voltage | 35mA max. | |
| Standby current | 100μA max. | |
| Max. output current | 30mA max. | |
| Output Voh (min.)/Vol (max.) | Vdd-1.1 /Vdd-1.5 | |
| Rise /Fall time | 500ps max. | |
| OE enable/disable time | 115ns max. | |
| RMS phase jitter (random) | 0.85ps max. | |

| | | | | | |
|--|---------------------|-----------------------|---------------------|-----------------------|------------------------|
| SMD Type | Output | Best Stability | Phase Jitter | Supply Voltage | Frequency Range |
| SJK9121 / SJK9122 [3.2×2.5, 5.0×3.2, 7.0×5.0 mm] | LVPECL /LVDS | 10 ppm | 0.6ps | 2.5V / 3.3V | 1 MHz~625 MHz |

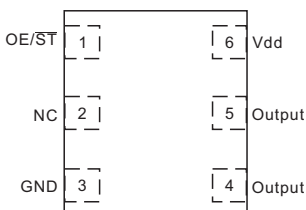
Standard Specifications

| Item / Type | SJK9121 | SJK9122 |
|--|-------------|---------|
| LVDS, DC and AC Characteristics | | |
| Current consumption | 55mA max. | |
| OE disable supply voltage | 35mA max. | |
| Differential output voltage | 450mV max. | |
| Standby current | 100mA max. | |
| Offset voltage | 1.375V max. | |
| Rise /Fall time | 700ps max. | |
| OE enable/disable time | 115ns max. | |
| RMS phase jitter (random) | 0.85ps max. | |

Outline Dimensions (Unit: mm)

| 3.2×2.5×0.75 mm | | | |
|-----------------|--|--|--|
| | | | |
| 5.0×3.2×0.75 mm | | | |
| | | | |
| 7.0×5.0×0.90 mm | | | |
| | | | |

Pin Map



| Pin | Connection | Function |
|-----|------------|------------------------------------|
| 1 | OE/ST/NC | Output Enable, Standby, No Connect |
| 2 | NC | No Connect |
| 3 | GND | Vdd power supply ground |
| 4 | Output | Oscillator output |
| 5 | OutputN | Complementary oscillator output |
| 6 | Vdd | Power supply voltage |