

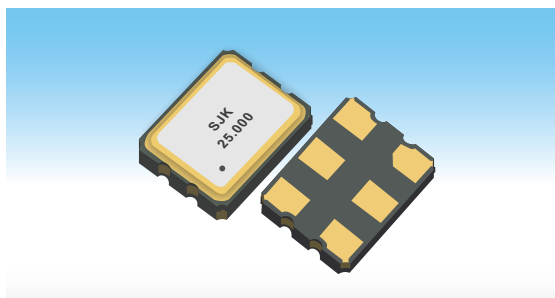
# VCXO / Voltage Controlled Crystal Oscillator

3S Series SMD 3225 VCXO

1.25~250MHz

O: CMOS

Size: 3.2×2.5×1.0mm



Actual size

## Features

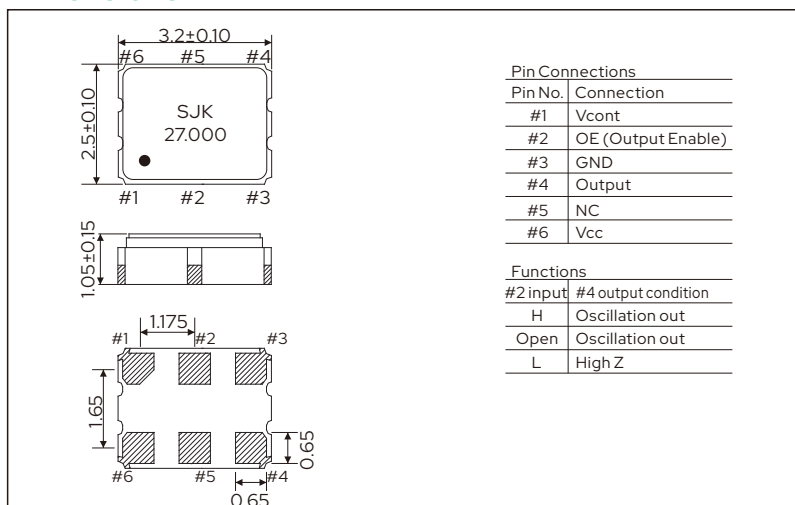
- SMD 3225 VCXO (Voltage Controlled Crystal Oscillator)
- 3-state function
- Operating voltage: 1.8V~3.3V
- CMOS output with high frequency range: 1.25MHz~250MHz
- Low current consumption
- Low phase noise and jitter
- Application for set-top boxes, SONET /ATM, FPGAs, Fibre Channel, Wireless repeaters, Transponders, HDTV, etc
- RoHS Compliant /Pb Free



## Standard Specifications

| Item                                            | Type | 3S Series SMD 3225 VCXO             |                         |
|-------------------------------------------------|------|-------------------------------------|-------------------------|
| Output Type                                     |      | CMOS                                |                         |
| Load condition                                  |      | 15pF, or specify                    |                         |
| Frequency Range                                 |      | 1.25MHz~50MHz                       | 50MHz~250MHz            |
| Supply Voltage                                  |      | 1.8V / 3.3V                         | 2.5V / 3.3V             |
| Control Voltage Center                          |      | 0.9V / 1.65V                        | 1.25V / 1.65V           |
| Control Voltage Range                           |      | 0.0V~1.8V / 0.3V~3.0V               | 0.25V~2.25V / 0.3V~3.0V |
| Frequency Stability (All Condition)             |      | ±25ppm, ±50ppm, ±100ppm, or specify |                         |
| Frequency Adjustment Range                      |      | ±80ppm min., or specify             |                         |
| Current Consumption                             |      | 45mA max.                           | 48mA max.               |
| Symmetry                                        |      | 40~60%                              | 45~55%                  |
| 0 Level Output Voltage (V <sub>OL</sub> )       |      | V <sub>CC</sub> ×0.1 max.           |                         |
| 1 Level Output Voltage (V <sub>OH</sub> )       |      | V <sub>CC</sub> ×0.9 min.           |                         |
| Rise Time / Fall Time                           |      | 6ns max.                            | 1ns max.                |
| OE Pin 0 Level Input Voltage (V <sub>IL</sub> ) |      | 0.3V <sub>CC</sub> max.             |                         |
| OE Pin 1 Level Input Voltage (V <sub>IH</sub> ) |      | 0.7V <sub>CC</sub> min.             |                         |
| Phase Jitter (12KHz~20MHz)                      |      | 1.0ps max.                          | 0.6ps typ.              |
| Start-up Time                                   |      | 10ms max.                           |                         |
| Linearity                                       |      | 10% max.                            |                         |
| Input Impedance                                 |      | 5MΩ typ.                            | 1MΩ typ.                |
| Operating Temperature Range                     |      | -20~+70°C, -40~+85°C, or specify    |                         |
| Storage Temperature Range                       |      | -55~+125°C                          |                         |
| Packing unit                                    |      | 3000 pcs/reel                       |                         |

## Dimensions



## Recommended Land Pattern [mm]

