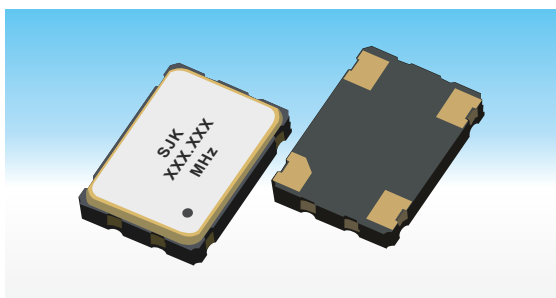


# Spread Spectrum Crystal Oscillator

7Z Series SMD7050 EMI Reduction Crystal Oscillator 3~200MHz O: CMOS Size: 7.0×5.0×1.4mm



Actual size

## Features

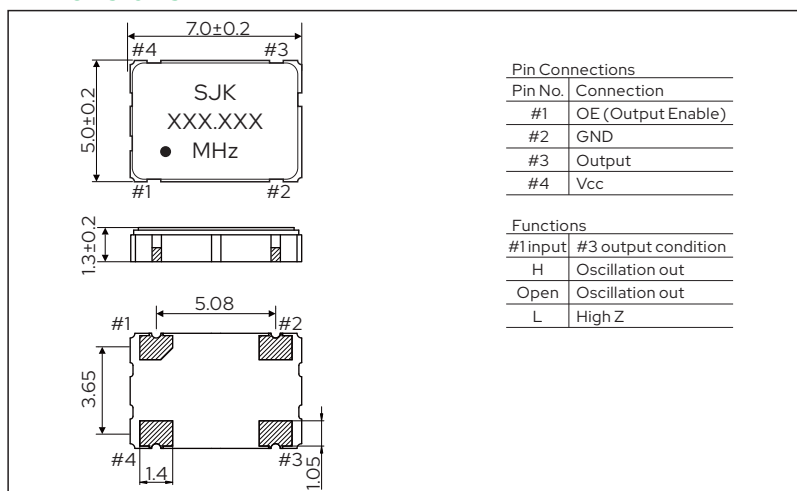
- SMD7050 EMI reduction spread spectrum clock oscillator
- Reduce electromagnetic interference (EMI) by approx. 3dB to 18dB
- 3-state function available
- Supply voltage: 1.8V /2.5V /3.3V
- CMOS output with frequency range: 3MHz~200MHz
- Application for Media player, Surveillance, Medical equipment, IP camera, LED module, etc.
- RoHS Compliant /Pb Free



## Standard Specifications

| Item  |               | Type  | 7Z Series SMD7050 EMI Reduction Spread Spectrum Clock Oscillator |                                   |        |                                |
|---|---------------|---|--|-----------------------------------|--------|--------------------------------|
| Output Type                                     |               | CMOS  |  |                                   |        |                                |
| Load condition                                  |               | 15pF, or specify                            |  |                                   |        |                                |
| Frequency Range                                 |               | 16MHz~40MHz                                 |  | 3MHz~200MHz                       |        |                                |
| Supply Voltage                                  |               | 1.8V /2.5V /3.3V                            |  | 2.5V /3.3V                        |        |                                |
| Frequency Stability (All Condition)             |               | ±25ppm, ±30ppm, ±50ppm, ±100ppm, or specify |  |                                   |        |                                |
| Current Consumption                             |               | 6mA max.                                    |  | 30mA max.                         |        |                                |
| Stand-by Current                                |               | 1.2mA max.                                  |  | 2.0mA max.                        |        |                                |
| Spread Type                                     | Down Spread   | -2.00%                                      | -1.50%   | -1.00%                            | -0.80% | -0.25%~-4.0% in 0.25% steps    |
|   | Center Spread | ±1.00%                                      | ±0.75%   | ±0.50%                            | ±0.40% | ±0.125%~±2.0% in ±0.125% steps |
| EMI Reduction                                   |               | 3dB~12dB(Typ.) for the main mode            |  | 12dB~18dB(Typ.) for the main mode |        |                                |
| Modulation Carrier Frequency                    |               | 20KHz~52KHz                                 |  | 30KHz~40KHz                       |        |                                |
| Symmetry  |               | 40~60%                                      |  |                                   |        |                                |
| 0 Level Output Voltage (V <sub>OL</sub> )       |               | 0.1V <sub>cc</sub> max.                     |  |                                   |        |                                |
| 1 Level Output Voltage (V <sub>OH</sub> )       |               | 0.9V <sub>cc</sub> min.                     |  |                                   |        |                                |
| 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.                     |  |                                   |        |                                |
| Rise Time / Fall Time                           |               | 10ns max.                                   |  | 5ns max.                          |        |                                |
| Start-up Time                                   |               | 5ms max.                                    |  |                                   |        |                                |
| Operating Temperature Range                     |               | -20~+70°C, -40~+55°C, or specify            |  |                                   |        |                                |

## Dimensions



## Recommended Land Pattern [mm]

