

NP3225SB

Simple Packaged Crystal Oscillator (SPXO)

Main Application

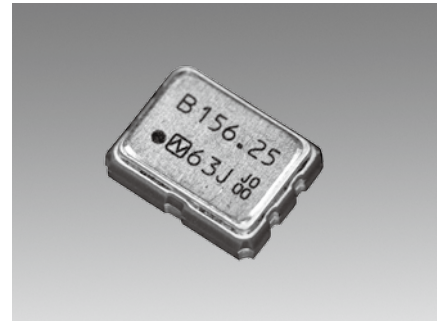
For communication equipment for ISDN, SDH/SONET, WiMAX, etc. and Base-stations

Features

- Differential Output SPXO
- Compact dimension 3.2 × 2.5 × 0.9 mm
- Supply Voltage : +2.5V or +3.3V
- LVDS output level
- Excellent low phase jitter (Typ. 0.15ps @156.25MHz)

Pb Free

RoHS Compliant
Directive 2011/65/EU



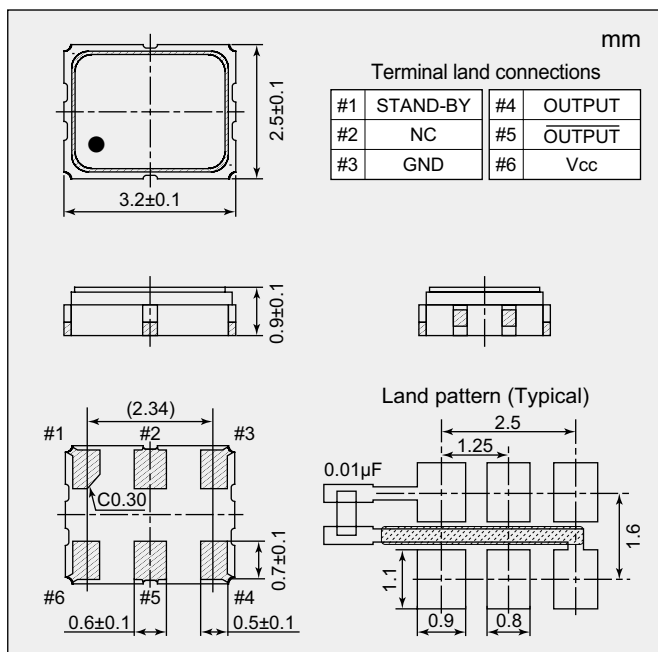
Absolute maximum rating
Supply Voltage (V_{CC}) -0.3 to +4.0 V
Storage Temperature Range -55 to +125 °C

Specifications

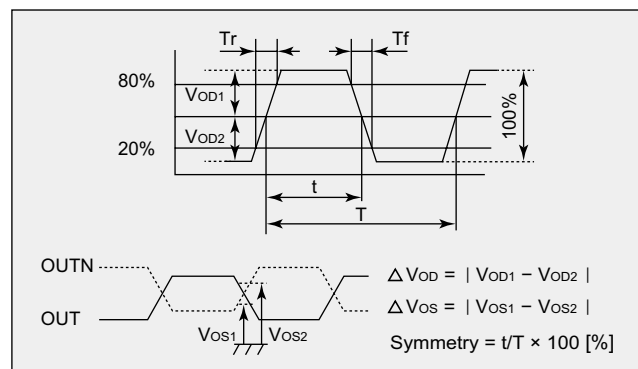
| Item | Model | NP3225SB | |
|---------------------------------------|---------------|---|-------------|
| Output Type | | LVDS | |
| Nominal Frequency Range (MHz) | | 100 to 170 | |
| Overall Frequency Tolerance *1 | | Max. ±50 × 10 ⁻⁶ | |
| Operating Temperature Range (°C) | | -40 to +85 | |
| Supply Voltage [V _{CC}] (V) | | +2.5 ± 5 % | +3.3 ± 10 % |
| Current Consumption | Enable (mA) | Max. 40 (STAND-BY=V _{CC} or OPEN, R _L =100Ω) | |
| | Stand-by (µA) | Max. 15 (STAND-BY=GND) | |
| Output Voltage (V) | | V _{OD1} : V _{OD2} : +0.247 to +0.454V (Differential output voltage) | |
| | | ΔV _{OD} : Max. 50mV (Differential output voltage) | |
| | | V _{OS1} , V _{OS2} : +1.125 to +1.375V (Differential output voltage) | |
| | | ΔV _{OS} : Max. 50mV (Differential output voltage) | |
| Rise Time / Fall Time (ns) | | Max. 0.4 (20 to 80% Waveform) | |
| Symmetry (%) | | 45 to 55 (at 50% Waveform) | |
| Output Load [R _L] (Ω) | | 100 (Differential output voltage) | |
| Start-up Time (ms) | | Max. 10 | |
| Phase Jitter (ps) | | Max. 1 (Offset Frequency : 12kHz to 20MHz) | |
| Specification Number | | NSC5081A | NSC5081B |

*1 : The frequency stability includes initial frequency tolerance, temperature variation, and supply variation.

Dimensions



Output waveform



Standby Function Table (Three-state)

| #1 Input | #4 and #5 output |
|---|-----------------------|
| Level H (V _{IH} ≥ 0.7 V _{CC}) or OPEN | Oscillation output ON |
| Level L (V _{IL} ≤ 0.3 V _{CC}) | High impedance |

Please specify the model name, frequency, and specification number when you order products.

For further questions regarding specifications, please feel free to contact us.