

## NP3225SAD

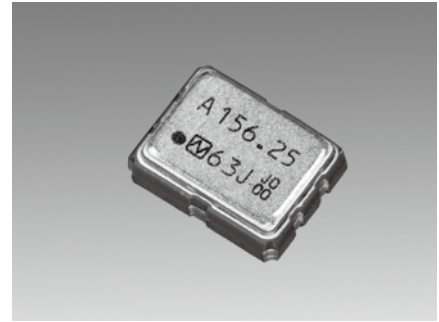
Simple Packaged Crystal Oscillator (SPXO)

### ■ Main Application

For Base station, Optical network terminal, SONET/SDH equipment, Low-end router and Ethernet equipment

### ■ Features

- Differential Output SPXO
- Compact dimension : 3.2 × 2.5 × 0.9 mm
- Overall Frequency Tolerance Max.  $\pm 25 \times 10^{-6}$  at  $-40$  to  $+85^\circ\text{C}$
- Supply Voltage : +3.3V
- Output Specification : LVPECL
- Conforms to AEC-Q200



Pb Free

RoHS Compliant  
Directive 2011/65/EU  
Directive (EU) 2015/863

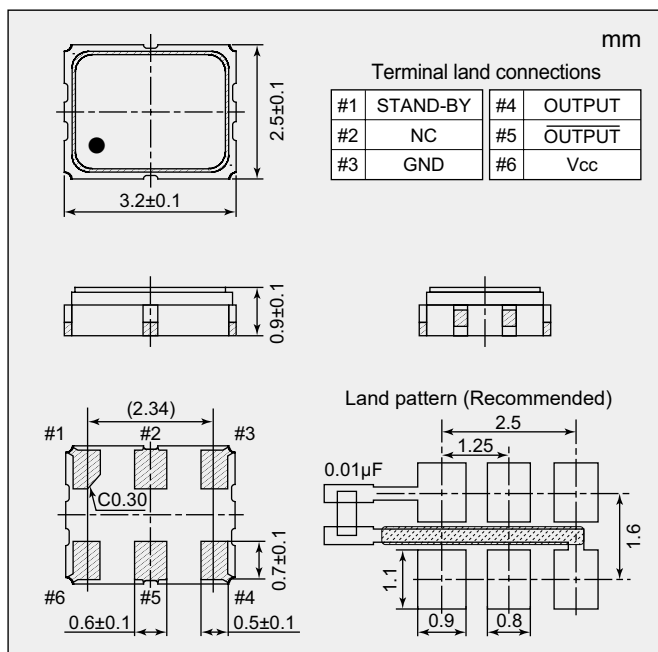
Absolute maximum rating  
Supply Voltage ( $V_{CC}$ )  $-0.3$  to  $+4.0$  V  
Storage Temperature Range  $-55$  to  $+125^\circ\text{C}$

### ■ Specifications

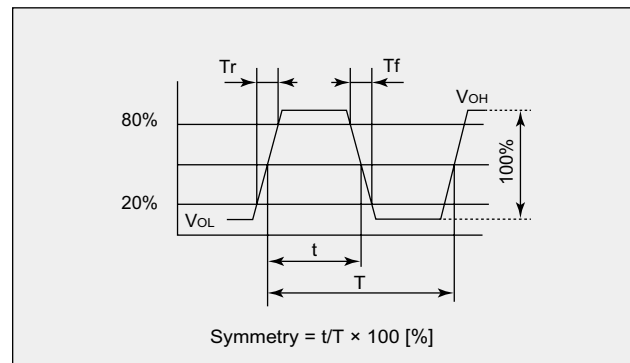
Item	Model	NP3225SAD
Output Specification		LVPECL
Nominal Frequency Range (MHz)		100, 156.25
Overall Frequency Tolerance *1		Max. $\pm 25 \times 10^{-6}$
Operating Temperature Range ( $^\circ\text{C}$ )		$-40$ to $+85$
Supply Voltage [ $V_{CC}$ ] (V)		$+3.3 \pm 10\%$
Current Consumption	Enable (mA)	Max. 60 (STAND-BY= $V_{CC}$ or OPEN, $R_L=50\Omega$ )
	Stand-by ( $\mu\text{A}$ )	Max. 15 (STAND-BY=GND)
Output Voltage (V)		$V_{OL}$ : Max. $V_{CC} - 1.5$ (DC characteristics)
		$V_{OH}$ : Min. $V_{CC} - 1.1$ (DC characteristics)
Rise Time / Fall Time (ns)		Max. 1 (20 to 80% Waveform)
Symmetry (%)		45 to 55 (at 50% Waveform)
Output Load ( $\Omega$ )		50 (Terminated to $V_{CC}-2.0\text{V}$ )
Start-up Time (ms)		Max. 10
Phase Jitter (ps)		Max. 1 (Offset Frequency : 12kHz to 20MHz)
Specification Number		NSC5347B

\*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 ( $V_{IH} \geq 0.7 V_{CC}$ ) or OPEN	Oscillation output ON
Level L ( $V_{IL} \leq 0.3 V_{CC}$ )	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.