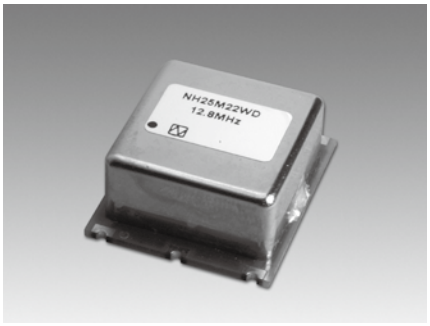
Crystal Oscillator

Model Name NH25M22WD

Oven-Controlled Crystal Oscillator (OCXO) for Fixed Communication Equipment

■ Main Application

- Mobile communication base station
- Exchanger
- Measuring instrument
- Synthesizer
- High-end router



■ Features

- Compact, with a low height.
- A surface-mount (SMD) package. Reflow soldering is possible.
- Excellent phase noise characteristics. (12.8MHz : -130dBc/Hz at 1kHz)
- Excellent long-term frequency stability.(±500×10^{-9}/year)

RoHS Compliant
Directive 2011/65/EU

■ Specifications

Item / Measurement condition / Model		NH25M22WD
Nominal frequency (MHz)		12.8
Supply voltage [V_{CC}] (V)		+3.3 ±5 %
Power consumption (W)	at start	Max. 2.7
	when stable (+25 °C)	Max. 1
Output voltage		HCMOS level (V_{OL} Max. 0.4 V, V_{OH} Min. 2.4 V)
Symmetry (%)	at 1/2 V_{CC}	40 to 60
Load impedance (pF)		15
Operating temperature range (°C)		−10 to +70
Storage temperature range (°C)		−40 to +85
Stabilization time	Stabilization Time (Frequency Stability) within ±500 ×10^{-9} after power on at +25°C , based on frequency after 60minutes operation.	Max. 3 minutes
Long-term frequency stability	Based on frequency after 30 days operation	Max. ±10×10^{-9}/day
	Based on frequency after 30 days operation	Max. ±500×10^{-9}/year
Frequency/Temperature characteristics	−10 to +70 °C	Max. ±300×10^{-9}
Frequency/Voltage coefficient	V_{CC} +3.3 V ± 5 %	Max. ±50×10^{-9}

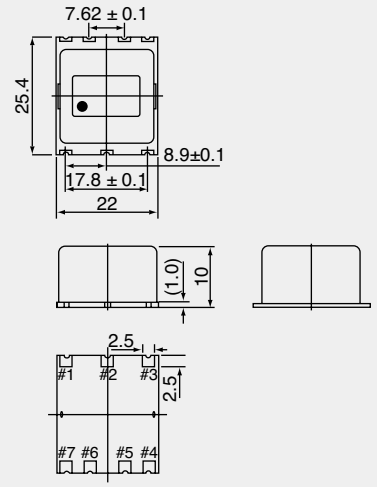
■ Reference Value

	Offset frequency	dBc/Hz
Phase noise (at 12.8 MHz)	1 Hz	−60
	10 Hz	−90
	100 Hz	−120
	1 kHz	−130
	10 kHz	−140

The value of phase noise changes when the frequency changes.

■ Dimensions

mm



Terminal land connections

#1	NC
#2	NC
#3	V_{CC}
#4	OUTPUT
#5	NC
#6	NC
#7	GND

Tolerance ±0.2 mm

■ List of Options

Power supply voltage [V_{CC}] (V)	+5
Nominal frequency range (MHz)	10 to 38.88

For details of options, please feel free to contact our sales representatives.

■ List of Ordering Codes

Nominal frequency (MHz)	Ordering Code
12.8	NH25M22WD-12.8M-NSA3418A

The above frequencies are NDK's standard frequencies. Frequencies other than the above are available. Feel free to contact our sales representatives.