# **Crystal Oscillator**

# Model Name NH37M28LA

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

#### ■ Main Application

- Mobile communication base station
- Measuring instrument
- Synthesizer

## Features

- Compact.
- Excellent rise characteristics.
- Excellent phase noise characteristics.
- Excellent aging characteristics.



#### RoHS Compliant Directive 2002/95/EC

#### Specifications

	Item Measuremen	nt condition Model	NH37M28LA
	Standard nominal frequency (MH	Z)	10
	Power supply voltage		DC +5V
	Power consumption		3 W max. at the start and 1.3 W max. when stable (+25°C)
	Output level		HCMOS (V_{OL} : 0.5V max., V_{OH} : 4.5V min.)
	Load		15pF
Duty Cycle (1/2Vcc)			40 to 60%
	Operating temperature range		–10 to +70°C
oility	Frequency warm-up characteristic	+25°C five minutes after power is on	±50×10 <sup>-9</sup> max.
ncy stability	Aging	Based on frequency after 72 hours operation	±2×10 <sup>-9</sup> /day max.
		Based on frequency after 72 hours operation	±50×10 <sup>-9</sup> /year max.
Frequency	Frequency / temperature characteristic	-10 to +70°C	±10×10 <sup>-9</sup> max.
Fre	Power supply variation characteristics	DC +5V±5%	±3×10 <sup>-9</sup> max.
Frequency control characteristic 0 to +4 V, positive polarity		0 to +4 V, positive polarity	±1×10 <sup>-6</sup> min.

Exchanger

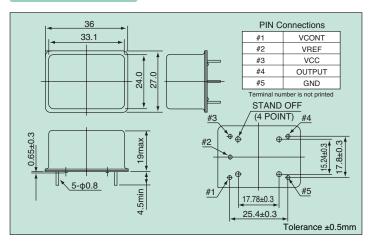
High-end router

#### ■ Reference Value

	Offset frequency	dBc/Hz
	1 Hz	–85 max.
	10 Hz	-120 max.
Phase noise (@10MHz)	100 Hz	-140 max.
	1k Hz	-145 max.
	10k Hz	-150 max.

The value of phase noise changes when the frequency changes.

#### Dimensions



### NIHON DEMPA KOGYO CO., LTD.

# List of Options

Operating temperature range	-40 to +70°C
Power supply voltage	DC +3.3V
Nominal frequency (MHz)	10 to 40

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

#### ■ List of Ordering Codes

Frequency (MHz)	Ordering Code
10	NH37M28LA-10M-NSA3427A

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