# **Crystal Oscillator**



# Model Name NH37M28LB

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

### ■ Main Application

- Mobile communications base station
- Measuring instrument
- ExchangerHigh-end router

Synthesizer

#### ■ Features

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





#### ■ Specifications

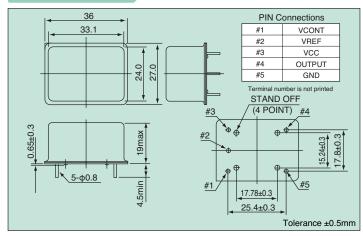
	Item Measuremen	nt condition Model	NH37M28LB
	Standard nominal frequency (MH	z)	10
	Power supply voltage		DC +5V
	Power consumption		3 W max. at the start and 1.3 W max. when stable (+25°C)
	Output level		HCMOS (V <sub>OL</sub> : 0.5V max., V <sub>OH</sub> : 4.5V min.)
	Load		50pF
	Duty Cycle (1/2Vcc)		40 to 60%
	Operating temperature range		−10 to +70°C
ility i	Frequency warm-up characteristic	+25°C five minutes after power is on	±50×10 <sup>-9</sup> max.
stability		Based on frequency after 72 hours operation	±2×10⁻⁰/day max.
		Based on frequency after 72 hours operation	±100×10 <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%	±1×10 <sup>-9</sup> max.
	Frequency control characteristic	0 to +5 V, positive polarity	±1×10 <sup>-6</sup> min.

## **■** Reference Value

	Offset frequency	dBc/Hz
	1 Hz	–80 max.
Db (@40MU=)	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



#### **■** 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	NH37M28LB-10M-NSA3423A

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