Crystal Oscillator

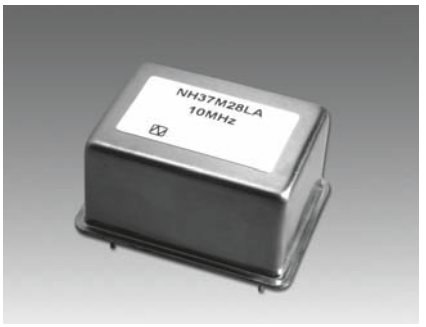
NDK Crystal Bridge to the Future

Model Name NH37M28LA

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

■ Main Application

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



RoHS Compliant
Directive 2002/95/EC

■ Features

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

■ Specifications

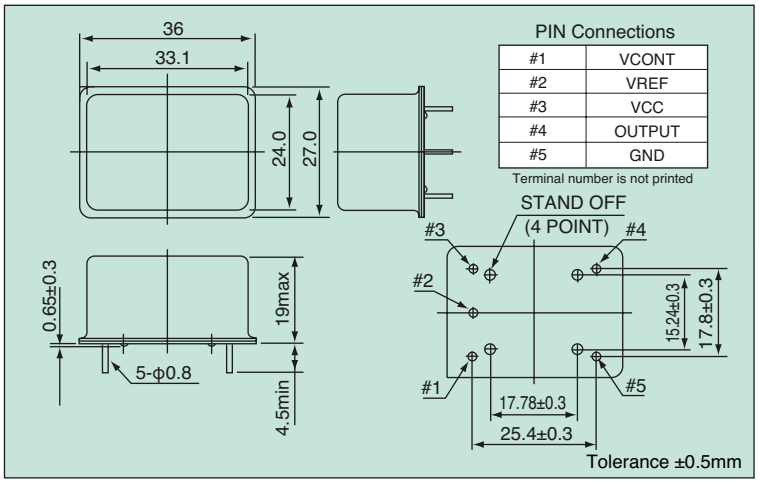
Item / Measurement condition			Model: NH37M28LA
Standard nominal frequency (MHz)			10
Power supply voltage			DC +5V
Power consumption			3 W max. at the start and 1.3 W max. when stable (+25°C)
Output level			HCMOS (V_{OL} : 0.5V max., V_{OH} : 4.5V min.)
Load			15pF
Duty Cycle (1/2Vcc)			40 to 60%
Operating temperature range			−10 to +70°C
Frequency stability	Frequency warm-up characteristic	+25°C five minutes after power is on	$\pm 50\times10^{-9}$ max.
	Aging	Based on frequency after 72 hours operation	$\pm 2\times10^{-9}$/day max.
		Based on frequency after 72 hours operation	$\pm 50\times10^{-9}$/year max.
	Frequency / temperature characteristic	−10 to +70°C	$\pm 10\times10^{-9}$ max.
	Power supply variation characteristics	DC +5V±5%	$\pm 3\times10^{-9}$ max.
Frequency control characteristic		0 to +4 V, positive polarity	$\pm 1\times10^{-6}$ min.

■ Reference Value

	Offset frequency	dBc/Hz
Phase noise (@10MHz)	1 Hz	−85 max.
	10 Hz	−120 max.
	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	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.