# Crystal Oscillator

NDK Crystal Bridge to the Future

## NH26M26LC

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

### ■ Main Application

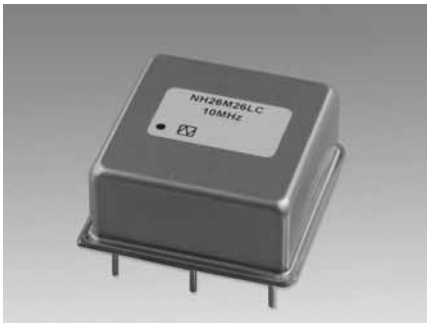
- Base stations for system mobile communications
- High-end router
- Synthesizer
- Measuring instrument
- Exchanger

### ■ Features

- Compact, with a low height.
- Excellent rise characteristics.
- Excellent phase noise characteristics.
- Excellent long-term frequency stability.

Pb Free

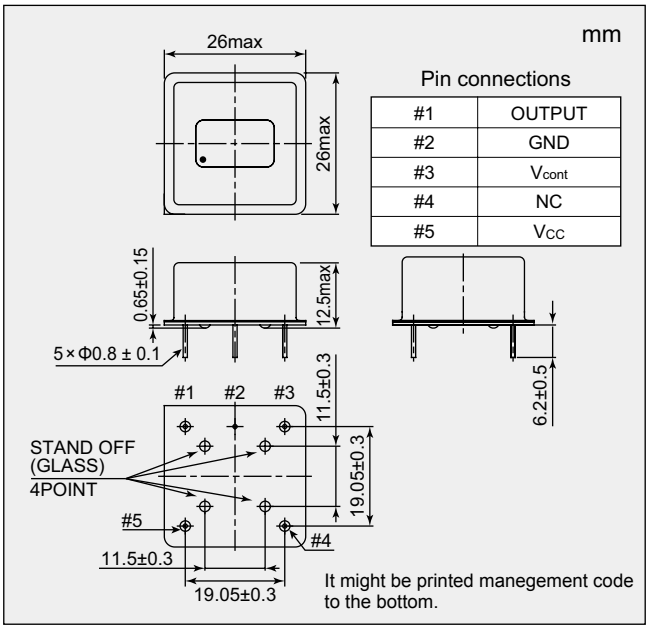
RoHS Compliant
Directive 2011/65/EU




### ■ Specifications

| Item \ Model | | NH26M26LC | |
|---|---|---|---|
| Nominal Frequency $f_{nom}$ (MHz) | | 10 | |
| Supply Voltage Vcc (V) | | +5 | |
| Load Impedance $C_L$ (pF) | | 15 | |
| Operating Temperature Range $T_{opr}$ (°C) | | –20 to + 70 | –40 to + 85 |
| Storage Temperature Range $T_{str}$ (°C) | | –40 to + 85 | |
| Power Consumption $P_{CC}$ (W) | at start | Max. 3.0 | |
| | when stable, at +25 °C | Max. 1.3 | |
| Frequency Tolerance $\Delta f/f_{nom}$ | at +25°C, $V_{cont}$ = Center, before shipment | Max. $\pm 200\times10^{-9}$ | |
| Frequency/Temperature Characteristics $\Delta f/f$ | at Operating Temperature Range | Max. $\pm 10\times10^{-9}$ | |
| Frequency/Voltage Coefficient $\Delta f/f$ | $V_{CC}$ ± 5% | Max. $\pm 3\times10^{-9}$ | |
| Long-term Frequency Stability $\Delta f/f$ | Based on frequency after 30 days operation | Max. $\pm 2\times10^{-9}$ / day | |
| | | Max. $\pm 50\times10^{-9}$ / year | |
| Stabilization Time (min.) | Time within specified frequency tolerance after power on at +25°C, based on frequency after 60minutes operation. | Max. 3 / within $\pm 50\times10^{-9}$ | Max. 5 / within $\pm 50\times10^{-9}$ |
| Frequency Control Range $\Delta f/f$ | | $V_{cont}$=+2V±2V | $V_{cont}$=+2V±2V |
| | | Min. $\pm 1\times10^{-6}$ | Min. $\pm 0.8\times10^{-6}$ |
| Frequency Change Polarity | | Positive | |
| Output Voltage | | HCMOS<br>$V_{OL}$ : Max. +0.5 V<br>$V_{OH}$ : Min. +4.5 V | |
| Symmetry (%) | at $(V_{OH} + V_{OL}) / 2$ | 40 to 60 | |
| Specification Number | | NSA3539A | NSA3539B |

### ■ Dimensions




### ■ Reference Value

| | Offset Frequency | dBc/Hz |
|---|---|---|
| Phase Noise (at 10 MHz) | 1 Hz | Typ. −100 |
| | 10 Hz | Typ. −125 |
| | 100 Hz | Typ. −142 |
| | 1 kHz | Typ. −151 |
| | 10 kHz | Typ. −152 |

We offer dedicated tool for evaluation of this product

Please specify the model name, frequency, and specification number when you order products.
For further questions regarding specifications, please feel free to contact us.