

NH20M20LB / NH25M22TA

High Precision Oscillator (Twin-OCXO)
for Fixed Communication Equipment

■ Main Application

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

■ Features

- Compact and excellent temperature characteristics.
- Excellent long-term frequency stability.
- Excellent phase noise characteristics.
- Hermetic sealing package for excellent environmental-proof performance.
- Supports wide temperature range (-40 to +85 °C)



Model : NH20M20LB



Model : NH25M22TA

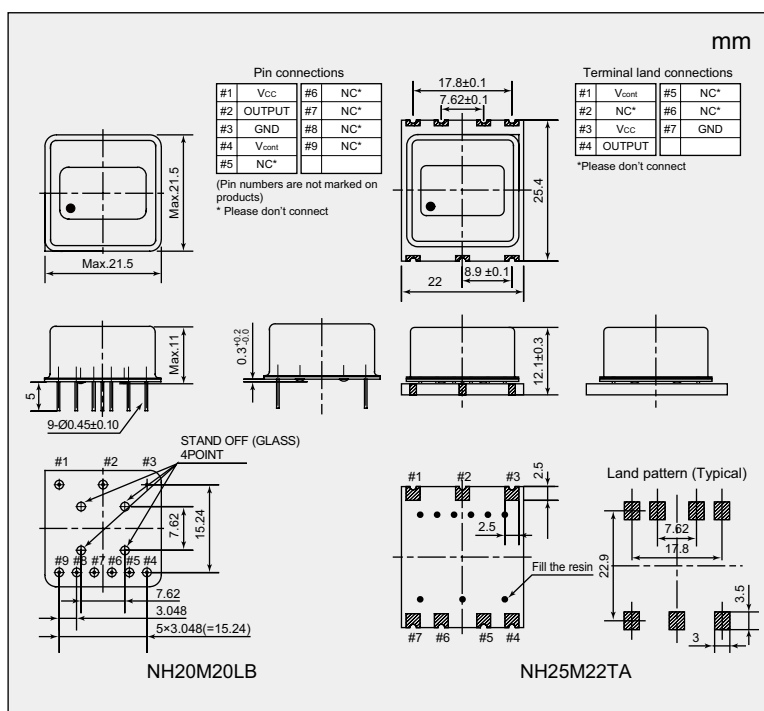
Pb
Free

RoHS Compliant
Directive 2011/65/EU

■ Specifications

Item	Measurement condition	Model	NH20M20LB / NH25M22TA
Nominal frequency range (MHz)			5 to 40
Nominal frequency (MHz)			10, 12.8, 13, 16.384, 19.2, 20, 25, 26, 30.72, 38.4, 38.88, 40
Supply voltage [V _{CC}] (V)			+3.3 ± 5 %
Power consumption (W)	at start		Max. 4.0
	when stable (+25 °C)		Max. 1.2
Output voltage			LVC MOS (V _{OL} Max. 0.3 V, V _{OH} Min. 3 V)
Symmetry (%)	at 1/2 V _{CC}		45 to 55
Load impedance (pF)			15
Operating temperature range (°C)			-40 to +85
Storage temperature range (°C)			-40 to +85
Stabilization time	Stabilization Time (Frequency Stability) within ±100 × 10 ⁻⁹ after power on at +25°C, based on frequency after 60 minutes operation.		Max. 5 minutes
Long-term frequency stability	Based on frequency after 30 days operation		Max. ±80 × 10 ⁻⁹ /year
Frequency/Temperature characteristics			Max. ±3 × 10 ⁻⁹
Frequency/Voltage coefficient	V _{CC} +3.3 V ± 5 %		Typ. ±5 × 10 ⁻⁹ (Max. ±10 × 10 ⁻⁹)
Frequency control range	V _{cont} +0 V to +2.8 V (@ +1.4V)		Min. ±1.0 × 10 ⁻⁶
Frequency change polarity	Frequency change polarity		Positive
	Linearity		Typ. 1%

■ Dimensions



■ Reference Value

	Offset frequency	dBc/Hz (Typ.)
Phase noise (at 10 MHz)	1 Hz	-80
	10 Hz	-105
	100 Hz	-130
	1 kHz	-150
	10 kHz	-160

The value of phase noise changes when the frequency changes.

■ List of Codes for Placing an Order

Model	NH20M20LB
Nominal frequency (MHz)	10, 12.8, 13, 16.384, 19.2, 20, 25, 26, 30.72, 38.4, 38.88, 40
Ordering Code	NH20M20LB-[]-NSA3577A

Model	NH25M22TA
Nominal frequency (MHz)	10, 12.8, 13, 16.384, 19.2, 20, 25, 26, 30.72, 38.4, 38.88, 40
Ordering Code	NH25M22TA-[]-NSA3566A

Please specify a NDK's nominal frequency in the square brackets. (Example 10MHz : Please specify 10M in the square brackets.) Frequencies other than the above are available. Feel free to contact our sales representatives.