

Crystal Oscillator

NH20M20LB / NH25M22TA

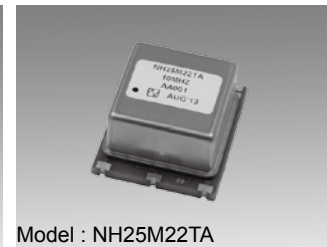
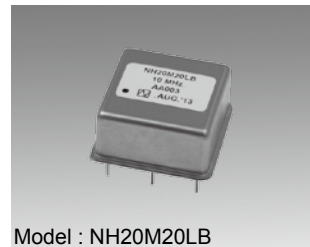
High Precision Oscillator (Twin-OCXO)
for Fixed Communication Equipment

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)



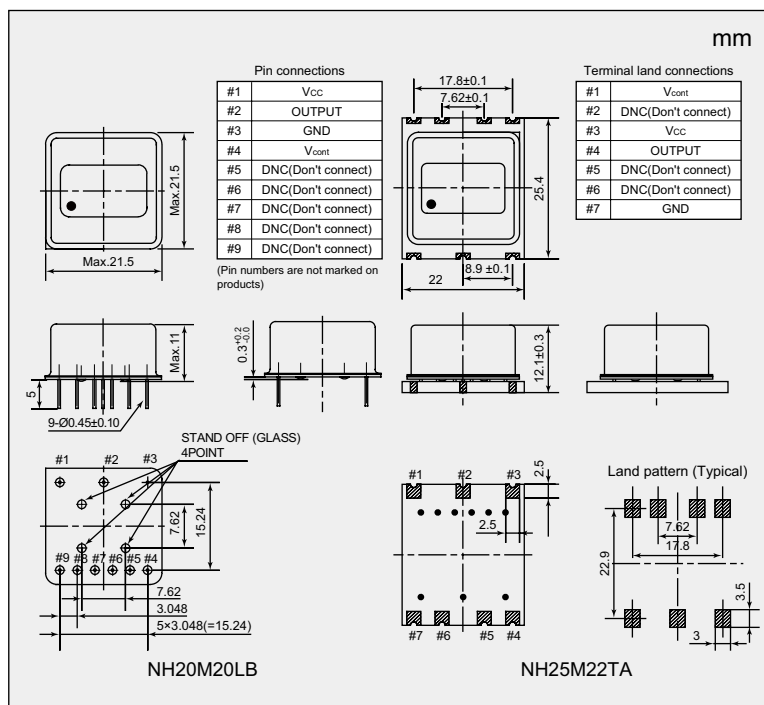
Pb Free

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			LVCMOS (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 60minutes operation.		Max. 5 minutes	
Long-term Frequency Stability	Based on frequency after 30 days operation		Max. ±1 × 10 ⁻⁹ /day	
			Max. ±80 × 10 ⁻⁹ /year	
Frequency/Temperature Characteristics			Max. ±3 × 10 ⁻⁹	
Frequency/Voltage Coefficient	V _{CC} +3.3 V ± 5 %		Max. ±1 × 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%	
Specification Number			NSA3577A	NSA3566A

Dimensions



Reference Value

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

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