



Crystal Oscillator

NH20M20LB / NH25M22TA

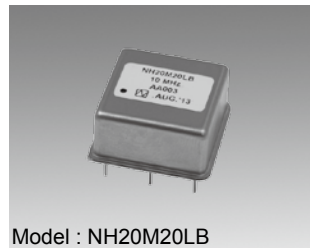
High Precision Oscillator (Twin-OCXO)
for Fixed Communication Equipment

Main Application

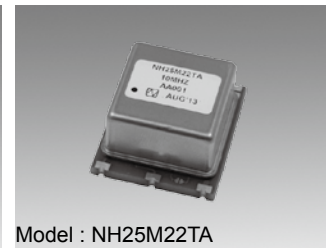
- Base stations for system mobile communications
- Optical transmission system • Measuring instrument
- Synthesizer • Exchanger • High-end router

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)



Model : NH20M20LB



Model : NH25M22TA

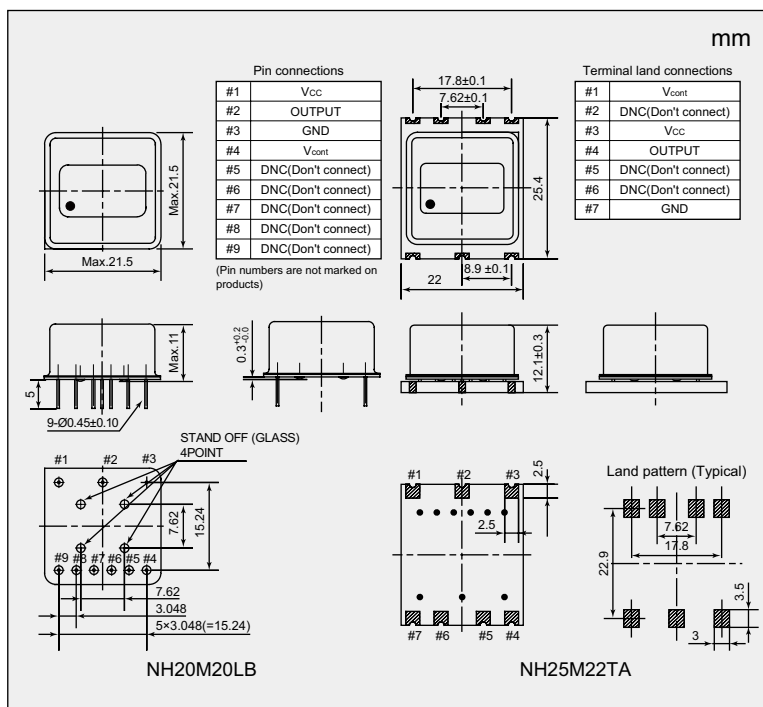
Pb Free

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			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.