Crystal Oscillator

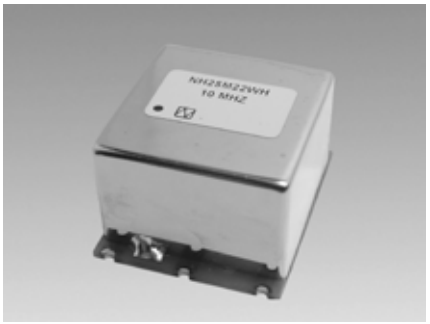
Crystal Bridge to the Future

NH25M22WH

Oven Controlled Crystal Oscillator (OCXO) for Fixed Communication Equipment

■ Main Application

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



■ Features

- Excellent temperature characteristics. (Max. ±3×10^{-9})
- Excellent long-term frequency stability.(Max. ±30×10^{-9} / year)
- Excellent phase noise characteristics at frequency offsets. (-100dBc / Hz at 1Hz offset)

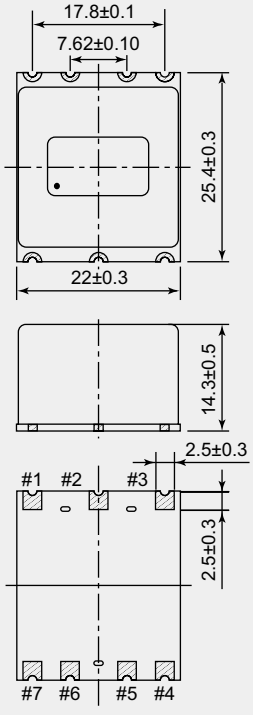
Pb Free

RoHS Compliant
Directive 2011/65/EU

■ Specifications

Item / Measurement condition \ Model		NH25M22WH
Nominal frequency (MHz)		10
Supply voltage [V_{CC}] (V)		+5 ±5 %
Power consumption (W)	at start	Max. 3
	when stable (+25 °C)	Max. 1.1
Output voltage		HCMOS level (V_{OL} Max. 0.5 V, V_{OH} Min. 3.5 V)
Symmetry (%)	at+(V_{OH} + V_{OL}) / 2	40 to 60
Load impedance (pF)		15
Operating temperature range (°C)		0 to +70
Storage temperature range (°C)		−40 to +85
Stabilization time	Stabilization Time (Frequency Stability) within ±500 ×10^{-9} after power on at +25°C , based on frequency after 60minutes operation.	Max. 90 seconds
	Stabilization Time (Frequency Stability) within ±50 ×10^{-9} after power on at +25°C , based on frequency after 60minutes operation.	Max. 3 minutes
Long-term frequency stability	Based on frequency after 30 days operation	Max. ±1×10^{-9}/day
		Max. ±30×10^{-9}/year
Frequency/Temperature characteristics	0 to +70 °C	Max. ±3×10^{-9}
Frequency/Voltage coefficient	V_{CC} +5 V ± 5 %	Max. ±3×10^{-9}

■ Dimensions



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Terminal land connections

#1	DNC (Do not connect)
#2	DNC
#3	V_{CC}
#4	OUTPUT
#5	DNC
#6	DNC
#7	GND

■ 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. −152
	10 kHz	Typ. −152

Short-term frequency stability (at 10MHz)	τ=1	Typ. 3.8×10^{-12}

■ List of Ordering Codes

Nominal frequency (MHz)	Ordering Code
10	NH25M22WH-10M-NSA3628A

We offer a test instrument(charge) for measuring accurately.
The above frequency are NDK's standard frequency.
Frequencies other than the above are available. Feel free to contact our sales representatives.