

# 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<sup>-9</sup> / year)
- Excellent phase noise characteristics at frequency offsets.
  (-100dBc / Hz at 1Hz offset)



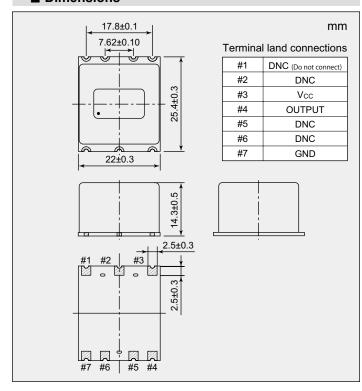




### **■** Specifications

	Model	NILIOEMOOVALI
Item Measurement condition		NH25M22WH
Nominal frequency (MHz)		10
Supply voltage [Vcc] (V)		+5 ±5 %
Power consumption (W)	at start	Max. 3
	when stable (+25 °C)	Max. 1.1
Output voltage		HCMOS level (Vol Max. 0.5 V, VoH Min. 3.5 V)
Symmetry (%)	at+(V <sub>OH</sub> + V <sub>OL</sub> ) / 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 <sup>-9</sup> after power on at +25°C, based on frequency after 60minutes operation.	Max. 90 seconds
	Stabilization Time (Frequency Stability) within ±50 ×10 <sup>-9</sup> 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. ±1×10⁻⁰/day
		Max. ±30×10 <sup>-9</sup> /year
Frequency/Temperature characteristics	0 to +70 °C	Max. ±3×10 <sup>-9</sup>
Frequency/Voltage coefficient	V <sub>CC</sub> +5 V ± 5 %	Max. ±3×10 <sup>-9</sup>

## **■** Dimensions



## **■** Reference Value

Phase noise (at 10 MHz)	Offset frequency	dBc/Hz
	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 <sup>-12</sup>

#### **■ 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.