

# Crystal Oscillator

## NH25M22WG Oven Controlled Crystal Oscillator (OCXO) for Fixed Communication Equipment

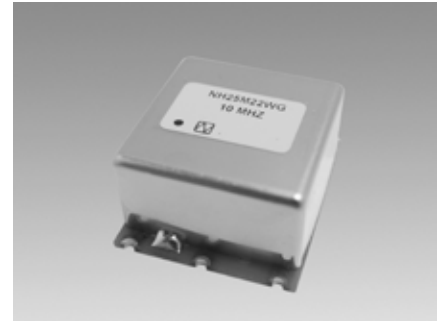
### Main Application

- Mobile phone base station(5G CU, 4G BBU)
- IEEE1588, synchronous Ethernet clock (SyncE)
- Optical transmission system
- Stratum 3E
- Synthesizer
- Timing and synchronization measuring equipment
- GNSS-DO

### Features

- Low power consumption.
- Very quick stabilization time.
- Excellent long-term frequency stability.
- Low near-carrier phase noise characteristics.

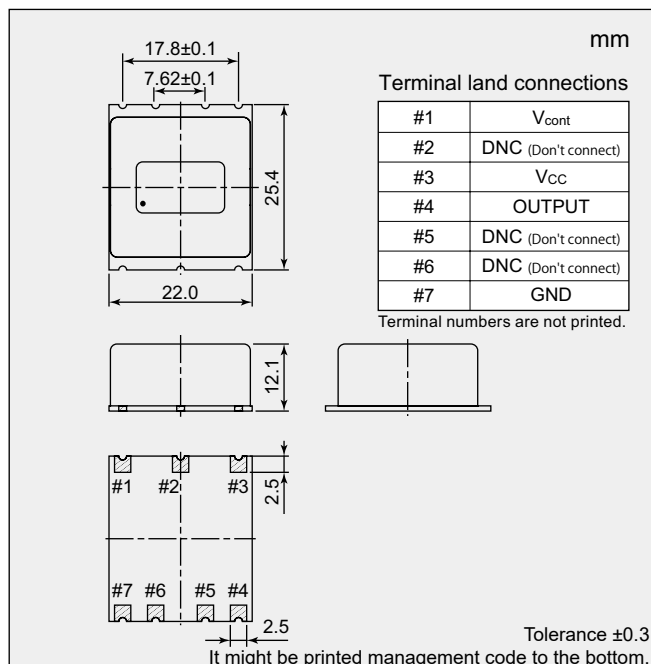
RoHS Compliant  
Directive 2011/65/EU  
Directive (EU) 2015/863



### Specifications

Item	Model	NH25M22WG			
Nominal Frequency $f_{nom}$ (MHz)		10			
Supply Voltage $V_{CC}$ (V)		+3.3		+5	
Load Impedance $C_L$ (pF)		15			
Operating Temperature Range $T_{opr}$ (°C)		0 to + 70	-40 to + 85	0 to + 70	-40 to + 85
Storage Temperature Range $T_{str}$ (°C)		-40 to + 85			
Power Consumption $P_{CC}$ (W)	at start	Max. 3.0			
	when stable, at +25 °C	Max. 1.3			
Frequency Tolerance $\Delta f/f_{nom}$	at +25°C, $V_{cont}$ = Center, before shipment	Max. $200 \times 10^{-9}$			
Frequency/Temperature Characteristics $\Delta f/f$	at Operating Temperature Range	Max. $\pm 10 \times 10^{-9}$			
Frequency/Voltage Coefficient $\Delta f/f$	$V_{CC} \pm 5\%$	Max. $\pm 3 \times 10^{-9}$			
Long-term Frequency Stability $\Delta f/f$	Based on frequency after 30 days operation	Max. $\pm 1 \times 10^{-9}$ / day			
		Max. $\pm 50 \times 10^{-9}$ / year			
Stabilization Time (min.)	Time within specified frequency tolerance after power on at +25°C, based on frequency after 60minutes operation.	Max. 3 / within $\pm 200 \times 10^{-9}$			
Frequency Control Range $\Delta f/f$	$V_{cont} = +1.4V \pm 1.4V$	$V_{cont} = +1.65V \pm 1.65V$	$V_{cont} = +2V \pm 2V$	$V_{cont} = +2.5V \pm 2.5V$	
	Min. $\pm 500 \times 10^{-9}$	Min. $\pm 500 \times 10^{-9}$	Min. $\pm 500 \times 10^{-9}$	Min. $\pm 500 \times 10^{-9}$	
Frequency Change Polarity		Positive			
Output Voltage	at $(V_{OH} + V_{OL}) / 2$	LVC MOS $V_{OL}$ : Max. +0.4 V $V_{OH}$ : Min. +2.4 V	HCMOS $V_{OL}$ : Max. +0.5 V $V_{OH}$ : Min. +4.5 V	LVC MOS $V_{OL}$ : Max. +0.4 V $V_{OH}$ : Min. +2.4 V	
		40 to 60			
Symmetry (%)		40 to 60			
Specification Number		NSC5127A	NSC5127B	NSC5128A	NSC5128B

### 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	

We offer dedicated tool (charge) for evaluation of this product

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