

NH9070WD

Oven Controlled Crystal Oscillator (OCXO)
for Fixed Communication Equipment

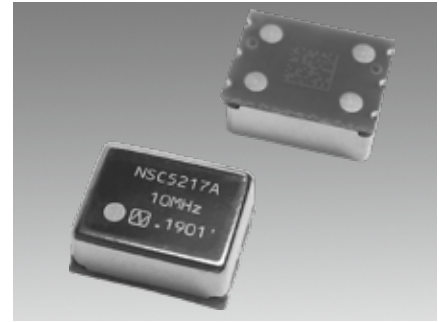
Main Application

- Base stations for system mobile communications (5G DU, 4G RRH)
- IEEE1588, Synchronous Ethernet clock (SyncE)
- Optical transmission systems Stratum 3E, 3E • GNSS-DO
- Timing and synchronous measuring equipment • Audio (10MHz)

Features

- Compact, with a low height.
- Supports high temperature range. (+95°C)
- Also, 14×9 mm OCXO compatible foot pattern is available by NH9070WC.

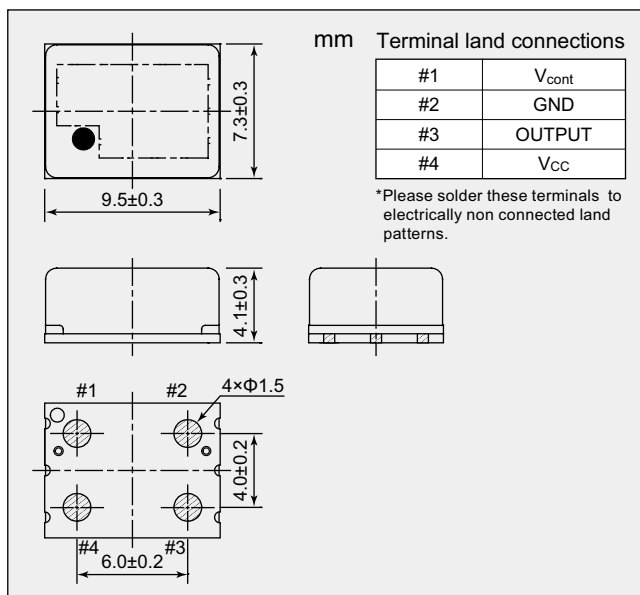
RoHS Compliant
Directive 2011/65/EU
Directive (EU) 2015/863



Specifications

Item	Model	NH9070WD	
Nominal Frequency f_{nom} (MHz)		10, 20, 30.72	
Supply Voltage V_{CC} (V)		+3.3	
Load Impedance C_L (pF)		15	
Operating Temperature Range T_{opr} (°C)		-40 to +95	
Storage Temperature Range T_{str} (°C)		-40 to +95	
Power Consumption P_{CC} (W)	at start	Max. 1.5 (Typ. 1.0)	
	when stable, at +25°C	Max. 0.6 (Typ. 0.45)	
Frequency Tolerance $\Delta f/f_{nom}$	at +25°C, V_{cont} = Center, before shipment	Max. 500×10^{-9}	
Frequency/Temperature Characteristics $\Delta f/f$	at Operating Temperature Range	Max. $\pm 20 \times 10^{-9}$	Max. $\pm 50 \times 10^{-9}$
	Frequency Temperature Slope $\Delta f/\Delta t$ (°C)	Max. $\pm 0.5 \times 10^{-9}$	Max. $\pm 1 \times 10^{-9}$
Frequency/Voltage Coefficient $\Delta f/f$	$V_{CC} \pm 5\%$	Max. $\pm 10 \times 10^{-9}$ (Typ. $\pm 5 \times 10^{-9}$)	
Long-term Frequency Stability $\Delta f/f$	Based on frequency after 30 days operation	Max. $\pm 3 \times 10^{-9}$ / day	
		Max. $\pm 300 \times 10^{-9}$ / year	
Stabilization Time (min.)	Time within specified frequency tolerance after power on at +25°C, based on frequency after 60minutes operation.	Max. 3 / within $\pm 300 \times 10^{-9}$	
Frequency Control Range (*) $\Delta f/f$		$V_{cont} = +1.65V \pm 1.65V$	
		Min. $\pm 1 \times 10^{-6}$	
Frequency Change Polarity		Positive	
Output Voltage		LVCMOS V_{OL} : Max. +0.3 V V_{OH} : Min. +3.0 V	
Symmetry (%)	at $(V_{OH} + V_{OL}) / 2$	45 to 55	
Specification Number		NSC5217A	NSC5217B

Dimensions



Reference Value

Phase noise (at 20 MHz)	Offset Frequency	dBc/Hz
	1 Hz	Typ. -80
	10 Hz	Typ. -115
	100 Hz	Typ. -140
	1 kHz	Typ. -152
	10 kHz	Typ. -155
100 kHz	Typ. -155	

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.