

Crystal oscillator for 5G

NH7050SA

Oven Controlled Crystal Oscillator (OCXO)
for Fixed Communication Equipment

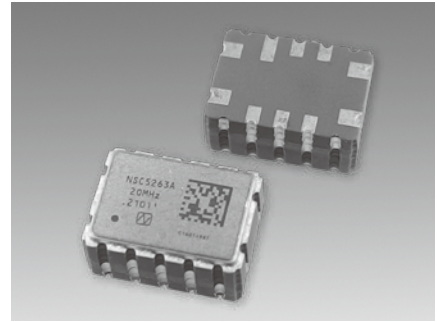
Main Application

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

Features

- Compact, with a low height.
- Supports high temperature range.(+95°C)
- Hermetic sealing package for excellent environmental-proof performance.

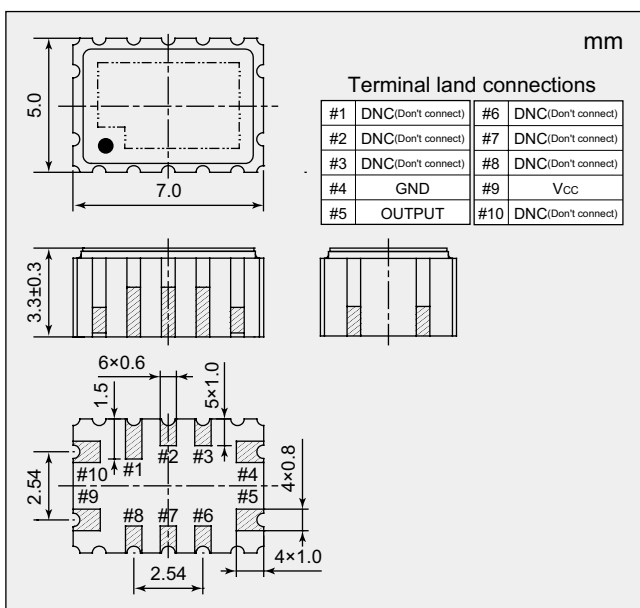
RoHS Compliant
Directive 2011/65/EU
Directive (EU) 2015/863



Specifications

Item	Model	NH7050SA	
Nominal Frequency f_{nom} (MHz)		10, 20, 30.72, 38.88	
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. 0.4)	
Frequency Tolerance $\Delta f/f_{nom}$	at +25°C, before shipment	Max. 500×10^{-9}	
Frequency/Temperature Characteristics $\Delta f/f$	(FMAX + FMIN)/2	Max. $\pm 20 \times 10^{-9}$	Max. $\pm 50 \times 10^{-9}$
		Max. $\pm 0.5 \times 10^{-9}$	Max. $\pm 1 \times 10^{-9}$
Frequency Temperature Slope $\Delta f/\Delta t$ (°C)		Max. $\pm 10 \times 10^{-9}$ (Typ. $\pm 5 \times 10^{-9}$)	
Frequency/Voltage Coefficient $\Delta f/f$	$V_{cc} \pm 5\%$	Max. $\pm 3 \times 10^{-9}$ / day	
Long-term Frequency Stability $\Delta f/f$	Based on frequency after 30 days operation (20MHz)	Max. $\pm 300 \times 10^{-9}$ / year	
		Typ. 10 / within $\pm 25 \times 10^{-9}$ Max. 60 / within $\pm 25 \times 10^{-9}$	
Stabilization Time (min.)	Time within specified frequency tolerance after power on at +25°C, based on frequency after 60minutes operation.	Typ. 10 / within $\pm 25 \times 10^{-9}$ Max. 60 / within $\pm 25 \times 10^{-9}$	
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		NSC5263A	NSC5263B

Dimensions



Reference Value

Phase noise (at 10 MHz)	Offset Frequency	dBc/Hz
	1 Hz	Typ. -83
	10 Hz	Typ. -120
	100 Hz	Typ. -142
	1 kHz	Typ. -153
	10 kHz	Typ. -160
	100 kHz	Typ. -160

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

Contact Us

Standard catalog specifications are listed for the products listed.
Custom is available upon request. Mail : 5g-sl@ndk.com