



Crystal Oscillator

Model Name NW19M12WA/B

Frequency Controlled Crystal Oscillator (FCXO)
Clock Generator Modules

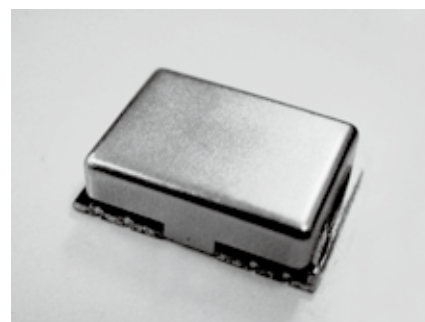
Main Application

GSM (GPRS, EDGE), Communications equipment

Features

- Output frequency in sync with input frequency can be obtained.
- Lock status can be monitored with VCXO control voltage monitor output used.

RoHS Compliant
Directive 2011/65/EU



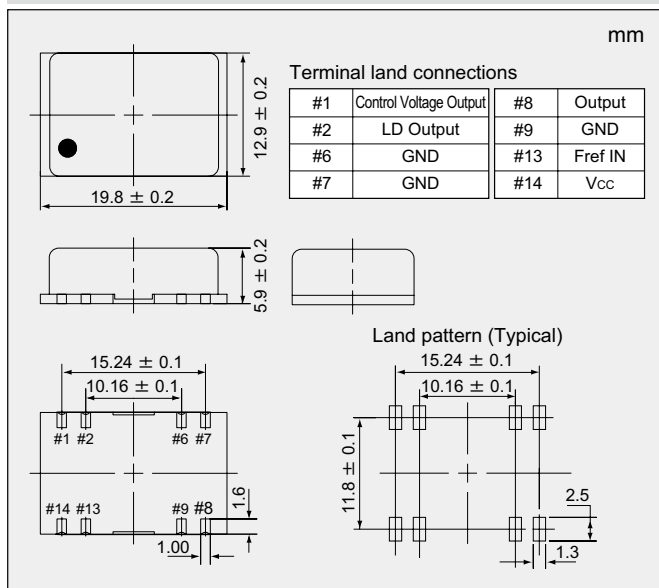
Specifications

Item	Model	NW19M12WA	NW19M12WB	
Supply voltage [V _{cc}] (V)		+3.3 ± 5 %		
Current consumption (mA)		Max. 40	Max. 50	
Operating temperature range (°C)		-10 to +75		
Storage Temperature Range (°C)		-20 to +85		
Input level (V _{p-p})		0.5 to 2.0		
Input reference frequency (MHz)		32.768	61.44	
Input reference frequency stability		Max. 2.0 × 10 ⁻⁶		
Input impedance (kΩ)		Min. 2.0		
Output level		CMOS		
Output frequency (MHz)		104	122.88	
Symmetry (%)		45 to 55 (1/2V _{CC} , at 25 °C)		
Lock detect output		L : PLL out of lock, H : PLL in lock		
Phase noise (@PLL Lock) (dBc/Hz)	Frequency offset	10 Hz	Typ. -80	Typ. -75
		100 Hz	Typ. -110	Typ. -97
		1 kHz	Typ. -136	Typ. -129
		10 kHz	Typ. -148	Typ. -147
		100 kHz	Typ. -151	Typ. -150

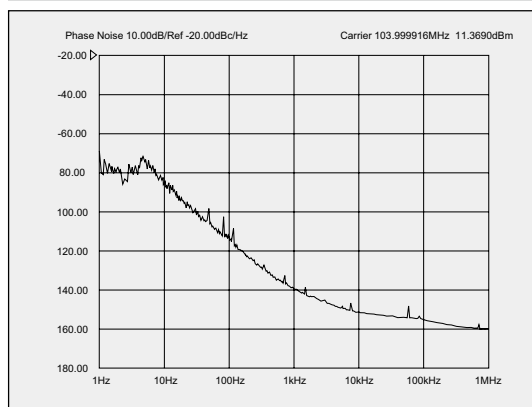
List of Ordering Codes

Input reference frequency (MHz)	Output frequency (MHz)	Ordering Code
32.768	104.0	NW19M12WA-104M-NSA3435A
61.44	122.88	NW19M12WB-122.88M-NSA3435B

Dimensions



Phase noise (Example 104MHz)



Phase Noise Measurement Block (104 MHz)

