

Crystal Oscillator

Model Name NW19M12WA/B

Frequency Controlled Crystal Oscillator (FCXO)
Clock Generator Modules

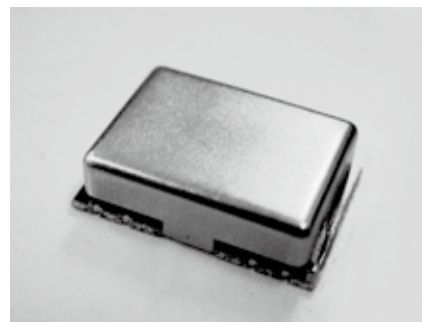
■ Main Application

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



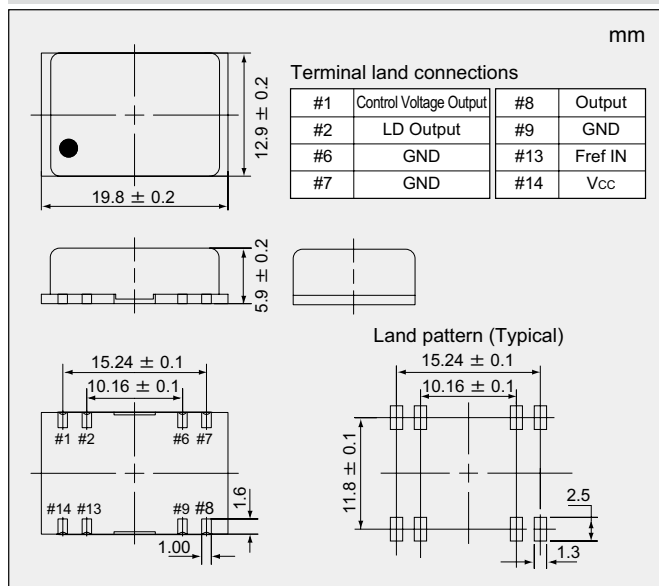
■ Specifications

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

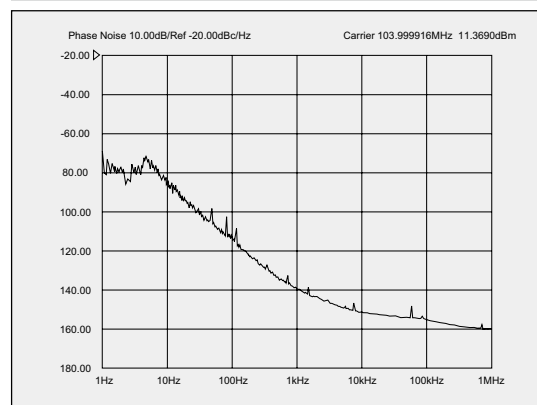
■ List of Ordering Codes

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)

