

Frequency Timing and Translation Modules

NEW



Model Name NW19M12WA/B

Frequency Controlled Crystal Oscillator (FCXO)
Clock Generator Modules

■ Main Application

GSM (GPRS, EDGE), Communications equipment

■ Features

- Low phase noise.
- Lock acquisition time < 3 second

RoHS Compliant
Directive 2002/95/EC



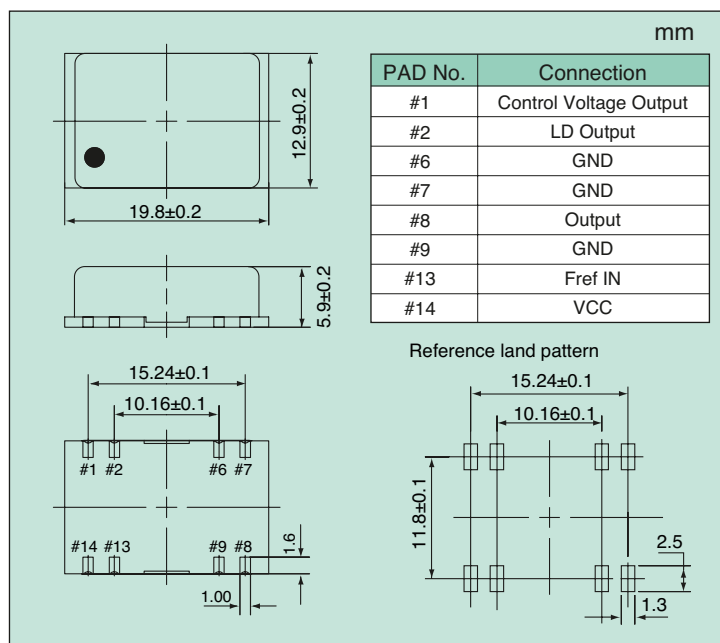
■ Specifications

Item	Model	NW19M12WA	NW19M12WB
Supply Voltage (V _{CC})		+3.3V±5%	
Current Consumption		40mA max	50mA max
Operating Temp. Range		-10 to +75°C	
Input Level		0.5Vp-p min, 2.0Vp-p max	
Input Reference Frequency (MHz)		32.768±2ppm	61.44±2ppm
Input Impedance		2 kΩ min	
Output Level		CMOS	
Output Frequency (MHz)		104.0	122.88
Duty Cycle (at 25°C)		45 to 55% (at 0.5×V _{CC})	
Control Voltage Output for Monitor		Internal RC filter (R = 470kΩ, C = 0.01 to 0.1μF)	
Lock Det. Outout		L : PLL out of lock, H : PLL in lock	
Phase Noise (@PLL Lock)	Offset Frequency	dBc/Hz	dBc/Hz
	10 Hz	-80 typ.	-75 typ.
	100 Hz	-110 typ.	-97 typ.
	1 kHz	-136 typ.	-129 typ.
	10 kHz	-148 typ.	-147 typ.
	100 kHz	-151 typ.	-150 typ.

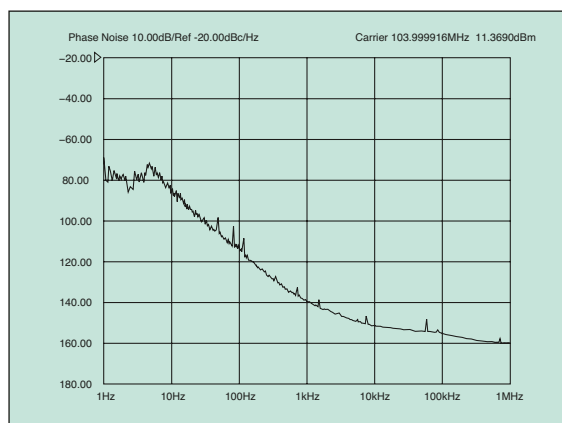
■ List of Ordering Codes

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 104 MHz)



■ Phase Noise Measurement Block (104 MHz)

