

# Crystal Oscillator

## Model Name NW36M25LA

Frequency Controlled Crystal Oscillator (FCXO)  
Advanced Stratum3 Module

### Main Application

SONET, SDH, FTTH, Communications equipment

### Features

- Four inputs, Stratum 3 solution for the Synchronous Timing Source in SONET/SDH network elements.
- Accepts 4 reference inputs in 9 steps from 8 kHz to 77.76 MHz (See specification below)
- Compliant with Telcordia GR1244CORE, GR253 and ITU-T G.812 / G.813.
- Hit-less reference switching.
- Frequency ramp control during reference switching.
- Supports Master / Slave operation
- Three output signals: one selectable (See specification below) up to 77.76 MHz, one fixed at 8 kHz and 1.544 MHz or 2.048 MHz BITS output.



\* Module markings may be changed without notice.

**RoHS Compliant**  
Directive 2011/65/EU

### Specifications

Item	Model	NW36M25LA
Supply voltage [V <sub>CC</sub> ] (V)		+3.3 ± 5 %
Current consumption (mA)		Typ. 150
Operating temperature range (°C)		0 to +70
Storage Temperature Range (°C)		-20 to +85
Input level		4-CMOS
Input reference frequency (MHz)		0.008, 1.544, 2.048, 12.96, 19.44, 25.92, 38.88, 51.84, 77.76
Output level		3-CMOS
Output frequency 1 (MHz)		OUTPUT 1 : 12.96, 19.44, 25.92, 38.88, 51.84 or 77.76
Output frequency 2,3 (MHz)		M/S OUT : 0.008, BITS CLK : 1.544 or 2.048
Free-run accuracy		Max. ±4.6×10 <sup>-6</sup>
Holdover		Max. ±0.37×10 <sup>-6</sup>
PLL bandwidth (Hz)		0.025 to 1.6 (user programmable)

### List of Ordering Codes

Output frequency (MHz)	Ordering Code
OUTPUT 1: One selectable up to 77.76 MHz	NW36M25LA-[ ]-NSA3437A

[ ]: OUTPUT1 frequency to order.  
For example, in 19.44 MHz case,  
NW36M25LA-19.44M-NSA3437A

### Dimensions

