

EQXO-1000XN Series Oscillators

14 pin Dual-in-Line

1.75MHz to 60.0MHz

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PRODUCT FEATURES

- Industry-standard 14 pin DIL package for compatibility
- Highly reliable industrial CMOS oscillator
- -55°C to +125°C Wide operating temperature
- Supply voltage 1.8V, 2.5V or 3.3 Volts DC
- Femto second integrated phase jitter 150fs typical
- Superior phase noise performance
- ITAR FREE

DESCRIPTION

The Euroquartz EQXO-1000XN series of 14 pin dual-in-line CMOS oscillators consist of a universal, hi-temp quartz crystal oscillator in a hermetically-sealed package. The oscillators provide a reliable source of clock signals with superior phase noise and jitter performance at low unit cost. The EQXO-1000XN series is ITAR free and manufactured in the UK.

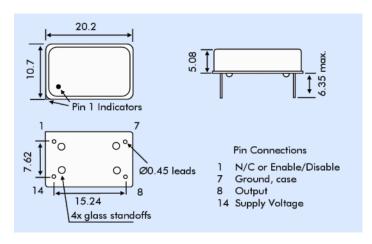
SPECIFICATION

Ageing at Ta=+25°C

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	Series Number	:	EQXO-1000XN			
	Frequency Ran	ge:	1.75MHz to 60A	۸Hz		
	Frequency Stability*:			±50ppm across -55°C +125°C ±100ppm across -55°C +125°C		
	Supply Voltage		+1.8 Volts ±109 +2.5 Volts ±109 +3.3 Volts ±109	% :		
	Output Load	HCMOS:	15p F			
	Rise/Fall Time	10 051	- , ,			
		1.8 - 2.5Vpp:	7ns (max.)			
		3.3 VDD:	10ns (max.) Measured betwee waveform (CL=1			
	Duty Cycle:		Standard:50% ±	:10%;		
			Option 50%±5%	6 is available, add		
			'S' to part numbe	er.		
	Operating Temperature Range:		-55° to +125°C			
	Storage Tempe	erature Range:	-55° to +125°C	-55° to +125°C		
	Start-up Time:		5ms (max.)			
	Current Consu	mption:	1.75 - 20MHz	20 - 60MHz		
	1.8V ^{DD}		2mA	4mA		
	2.5VDD		3mA	5mA		
	3.3VDD		4mA	6mA		
	Tristate Option:		Output is high impedance when '0' (<0.8 Volts) is applied to Pin 1, (internal pull-up). Disable time = 150ns max.			
	SSB Phase Nois	se (26MHz, 3.3V)				
		10Hz 100Hz 1kH 94 -127 -14	2 -156 -161			
	Phase Jitter(RM	S) [26MHz, 3.3V]:	150fs(typ)[12kH:	z to 20MHz integ]		
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±2ppm max. For first year

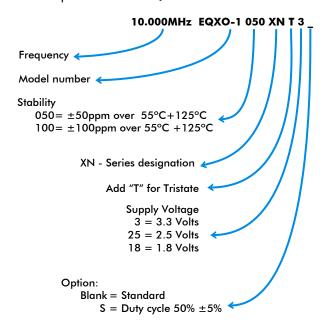
OUTLINE & DIMENSIONS



Out Voltage Level	Supply Voltage		
	+1.8 V	+2.5 V	+3.3 V
Logic Hi '1' (90% VDD max.)	1.62V	2.25V	2.97V
Logic Lo '0' (10% VDD max.)	0.18V	0.25V	0.33V

PART NUMBER GENERATION

EQXO-1000XN series oscillator part numbers derived as follows: Example: 10.000MHz EQXO-1050XNT3:



Issue 4

^{*} The frequency stability parameter is inclusive of frequency adjustment at 25°C and any variations due to load change, ageing, supply voltage change (±10%) and variations attributable to shock and vibration.