

PRODUCT FEATURES

- Industry-standard 8 pin DIL package for compatibility
- Wide frequency range from 20kHz to 160MHz
- Choice of supply voltage 1.8V, 2.5V, 3.3V or 5.0 Volts DC
- Hermetically sealed package for reliability and low ageing
- Optional Tristate function (Enable/Disable)
- Comprehensive stock holding
- Custom frequencies speedily produced in Euroquartz factory



DESCRIPTION

The Euroquartz EQXO-2000 series of 8 pin dual-in-line oscillators consist of a Universal, TTL/CMOS hybrid substrate and quartz crystal in a hermetically-sealed package. The oscillators provide a reliable source of clock signals with low unit cost.

SPECIFICATION

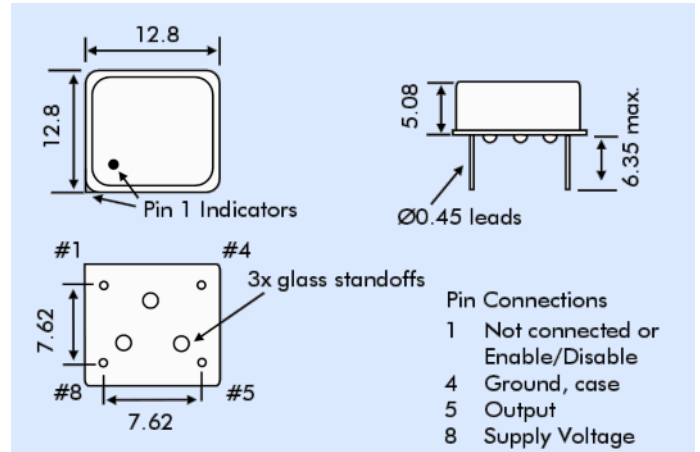
Series Number:	EQXO-2000		
Frequency Range:	20kHz to 160MHz		
Frequency Stability*:	See Model Number table		
Supply Voltage:	+1.8 Volts ±5%:	CMOS	1.8MHz to 60.0MHz
	+2.5 Volts ±5%:	CMOS	0.3MHz to 125MHz
	+3.3 Volts ±5%:	TTL/CMOS	20kHz to 130MHz
	+5.0 Volts ±10%:	TTL/CMOS	20kHz to 160MHz
Output Load	HCMOS:	15pF standard, 50pF available	
	TTL:	2 to 10TTL gates	
Rise/Fall Time	HCMOS:	10ns max., 3ns typical. Measured between 10% to 90% waveform (CL=15pF)	
	TTL:	10ns max., 3ns typical. Measured between 0.4V _{DC} to 2.4V _{DC} (RL=390Ω CL = 15pF)	
Duty Cycle:	HCMOS:	40% (min.)/60% (max.) Measured at 50% waveform. 50%±5% is available, add 'S' to part number.	
Operating Temperature Range	Commercial:	0° to +70°C	
	Industrial:	-40° to +85°C	
Storage Temperature Range:	-55° to +105°C		
Start-up Time:	5ms typical, 10ms max.		
Current Consumption:	10mA ~ 45mA (frequency dependant)		
Tristate Option:	Output is high impedance when '0' (<0.8 Volts) is applied to Pin 1, (internal pull-up). Disable time = 150ns max.		

* 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.

TTL/HCMOS Voltage Levels

Output Voltage Level	Supply Voltage			
	+1.8 V	+2.5 V	+3.3 V	+5.0 V
TTL HIGH '1':			2.4V	2.4V
HCMOS HIGH '1':	1.62V	2.25V	2.97V	4.5V
TTL LOW '0':			0.4V	0.4V
HCMOS LOW '0':	0.18V	0.25V	0.33V	0.5V

OUTLINE & DIMENSIONS



MODEL NUMBERS

Model Number	Stability over O.T.R.	Operating Temperature Range
EQXO-2010UC	±10ppm	0° ~ +50°C
EQXO-2015UC	±15ppm	0° ~ +70°C
EQXO-2025UC	±25ppm	0° ~ +70°C
EQXO-2050UC	±50ppm	0° ~ +70°C
EQXO-2100UC	±100ppm	0° ~ +70°C
EQXO-2025UI	±25ppm	-40° ~ +85°C
EQXO-2050UI	±50ppm	-40° ~ +85°C
EQXO-2100UI	±100ppm	-40° ~ +85°C

PART NUMBER GENERATION

EQXO-2000 series oscillator part numbers are derived as follows:
Example: 10.000MHz EQXO-1050UIT3

