

8 pin Dual-in-Line Gull-Wing Clock Oscillators

- 8 pin DIL package with 'Gull-Wing' leads for SMD use
- Wide frequency range 20kHz to 160MHz
- Choice of supply voltage 3.3 Volts or 5.0 Volts DC
- Hermetically sealed package for reliability and low ageing
- Optional Tristate function (Enable/Disable)
- Comprehensive stock holding
- Custom frequencies readily produced in Euroquartz factory

DESCRIPTION

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

SPECIFICATION

| | |
|------------------------------|---------------------------|
| Series Model Number: | EQXO-2000GW |
| Frequency Range: | 20kHz to 160MHz |
| Frequency Stability*: | See table |
| Supply Voltage: | +5.0VDC±10% or +3.3VDC±5% |
| Output Load | |

| | |
|---------------|-------------------------------|
| HCMOS: | 15pF standard, 50pF available |
| TTL: | 2 to 10TTL gates |

Symmetry

| | |
|---------------|------------------------------|
| HCMOS: | 40/60% measured at 50%Vdd |
| TTL: | 40/60% measured at 1.4 Volts |

Operating Temperature Range

Commercial: 0° to +70°C

Industrial: -40° to +85°C

Extended Industrial: -55° to +105°C

Storage Temperature Range:

Start-up Time: 5ms typical, 10ms max.

Current Consumption: 15mA ~ 45mA

(frequency dependant)

Tristate Option:

Output is high impedance when '0' (<0.8 Volts) is applied to Pin 1, (internal pull-up).

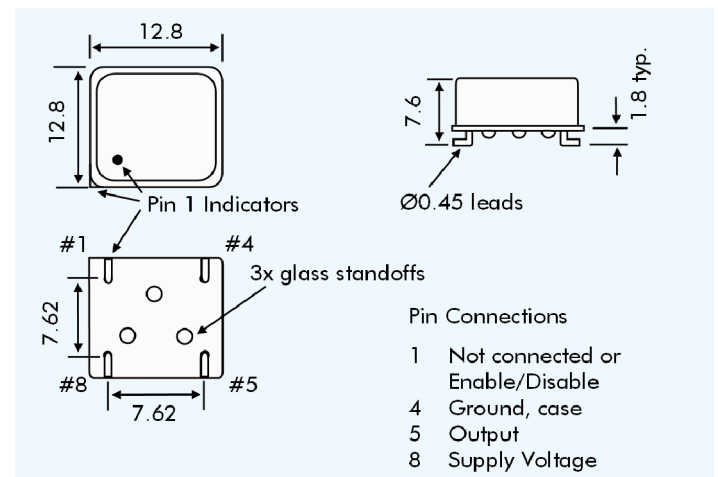
Disable time = 150ns max.

* 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

| Input Voltage: | +3.3 VDC | +5.0 VDC |
|-------------------------|----------------|-----------------|
| Frequency Range: | 20kHz ~ 125MHz | 20kHz ~ 160MHz |
| Output Voltage | | |
| TTL HIGH '1': | 2.4 V min. | 2.4V min. |
| HCMOS HIGH '1': | 2.97 V min. | Vcc - 0.5V min. |
| TTL LOW '0': | 0.4V max. | 0.4V max. |
| HCMOS LOW '0': | 0.33V max. | 0.5V max |

OUTLINE & DIMENSIONS



MODEL NUMBERS

| Model Number | Stability Over O.T.R. (ppm) | Operating Temperature Range |
|-----------------|-----------------------------|-----------------------------|
| EQXO-2010UC-GW | ±10ppm | 0° ~ +50°C |
| EQXO-2015UC-GW | ±15ppm | 0° ~ +70°C |
| EQXO-2025UC-GW | ±25ppm | 0° ~ +70°C |
| EQXO-2050UC-GW | ±50ppm | 0° ~ +70°C |
| EQXO-2100UC-GW | ±100ppm | 0° ~ +70°C |
| EQXO-2025UI-GW | ±25ppm | -40° ~ +85°C |
| EQXO-2050UI-GW | ±50ppm | -40° ~ +85°C |
| EQXO-2100UI-GW | ±100ppm | -40° ~ +85°C |
| EQXO-2050UIE-GW | ±50ppm | -55° ~ +105°C |
| EQXO-2100UIE-GW | ±100ppm | -55° ~ +105°C |

EXTENDED INDUSTRIAL TEMPERATURE RANGE

The part previously specified by Euroquartz Ltd as EQXO-2050UM-GW or EQXO-2100UM-GW has been superceded by the extended-industrial temperature range part EQXO-2***UIE-GW. This part will perform within specification over the temperature range of -55° to +105°C. Should a full military temperature range oscillator be required see specification for EQXO-2000BM series.

PART NUMBER GENERATION

EQXO-2000-GW series oscillator part numbers are derived as follows: Example: 10.000MHz EQXO-2050UIET3-GW:

