

EQXO-1000 Series 14 pin Dual-in-Line Clock Oscillators

DESCRIPTION

The Euroquartz EQXO-1000 series of 14 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.

PRODUCT FEATURES

- Industry-standard 14 pin DIL package for compatibility
- 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

SPECIFICATION

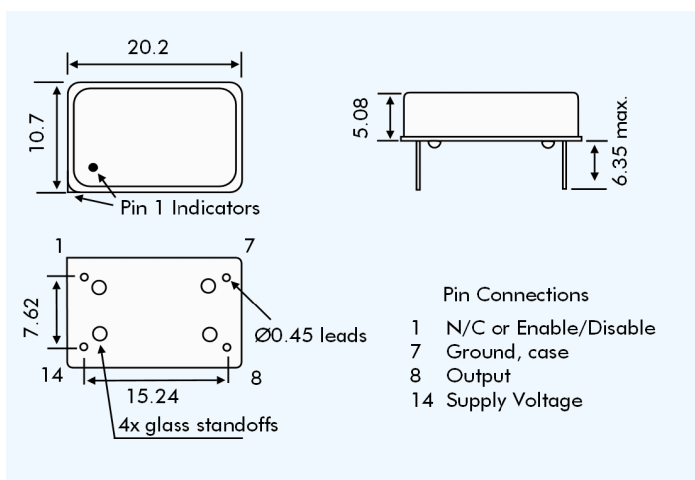
| | |
|------------------------------------|--|
| Series Model Number: | EQXO-1000 |
| Frequency Range: | 20kHz to 160MHz |
| Frequency Stability*: | See table |
| Supply Voltage: | +5.0 Volts DC \pm 10% |
| Output Load | |
| HCMOS: | 15pF standard, 50pF available |
| TTL: | 2 to 10TTL gates |
| Symmetry | |
| 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: | -55° to +105°C |
| 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 (\pm 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. | V _{cc} - 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-1010UC | \pm 10ppm | 0° ~ +50°C |
| EQXO-1015UC | \pm 15ppm | 0° ~ +70°C |
| EQXO-1025UC | \pm 25ppm | 0° ~ +70°C |
| EQXO-1050UC | \pm 50ppm | 0° ~ +70°C |
| EQXO-1100UC | \pm 100ppm | 0° ~ +70°C |
| EQXO-1025UI | \pm 25ppm | -40° ~ +85°C |
| EQXO-1050UI | \pm 50ppm | -40° ~ +85°C |
| EQXO-1100UI | \pm 100ppm | -40° ~ +85°C |
| EQXO-1050UIE | \pm 50ppm | -55° ~ +105°C |
| EQXO-1100UIE | \pm 100ppm | -55° ~ +105°C |

EXTENDED INDUSTRIAL TEMPERATURE RANGE

The part previously specified by Euroquartz Ltd as EQXO-1050UM or EQXO-1100UM has been superceded by the extended-industrial temperature range part EQXO-1***UIE. 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-1000BM series.

PART NUMBER GENERATION

EQXO-1000 series oscillator part numbers are derived as follows:
Example: 10.000MHz EQXO-1050UIET3:

