

LPO 42 SERIES, Model 7

4 pad SMD Package

DESCRIPTION

The Euroquartz LPO42 series of low power consumption oscillators are ideal parts providing the time base signals for real-time clocks. The oscillators have very low current consumption (as low as 14mA) and are ideal for battery operated devices such as data logging and portable test equipment.

FEATURES

- Very low current consumption from 14mA
- Industry-standard 4 pad SMD package
- Wide frequency range, from 1Hz to 160kHz
- Supply Voltage from 2.0 Volts to 15.0 Volts
- Standard CMOS output

SPECIFICATION

+3.3 VDC +5.0VDC Input Voltage: +2.0 Volts to +7.0 Volts is available Frequency Range: 20kHz to 160kHz (Limited to standard frequencies.) CMOS **Output Logic:**

Output Voltage

CMOS HIGH'1': 2.97V min. 4.0V min. CMOS LOW '0': 0.33V max. 0.4V max. **Calibration Tolerance:** see table opposite

Frequency Stability: see curve opposite

Current Consumption: 14mA typical 18mA typical

Rise/Fall Times: 25ns typical, 45ns maximum

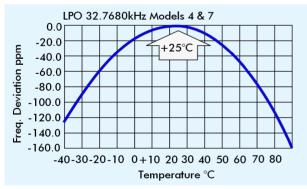
(Measured from 10%Vdd to 90%Vdd) Start-up Voltage:

Pin 1 Option, Tristate: Output is high impedance when LOW **Duty Cycle:** 50%±5% typical, 50%±10% maximum

Start-up Time: 450ms maximum Storage Temperature: -50° to +100°C

Ageing: ±5ppm maximum at 25°C

FREQUENCY DEVIATION vs TEMPERATURE



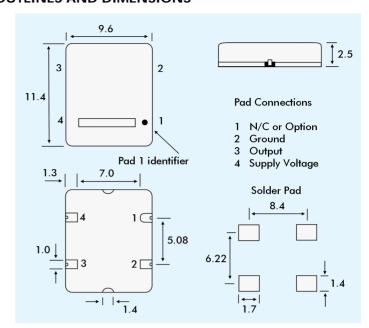
kHz RANGE OSCILLATORS mA CURRENT CONSUMPTION

If you require oscillators in the kHz frequency range with mA current consumption please see our standard CMOS oscillator range.

STOCK HOLDING AND CUSTOM PARTS

Euroquartz maintain a large stock of standard frequency and specification oscillators. If you require custom frequencies and/or specification oscillators, Euroquartz will manufacture in-house with short delivery

OUTLINES AND DIMENSIONS



CURRENT CONSUMPTION VS SUPPLY VOLTAGE



CALIBRATION TOLERANCE

| Euroquartz Part Number Suffix | Cailbration Tolerance at 25°C |
|-------------------------------------|-------------------------------------|
| Р | ±10ppm |
| Α | ±25ppm |
| В | ±50ppm |
| С | ±100ppm |

PART NUMBER GENERATION

LPO oscillators part numbers are derived as follows:

