EUROQUARTZ

LPO14 Oscillators

14 pin DIL Low-Power Oscillator — 1.0Hz to 160kHz

FEATURES

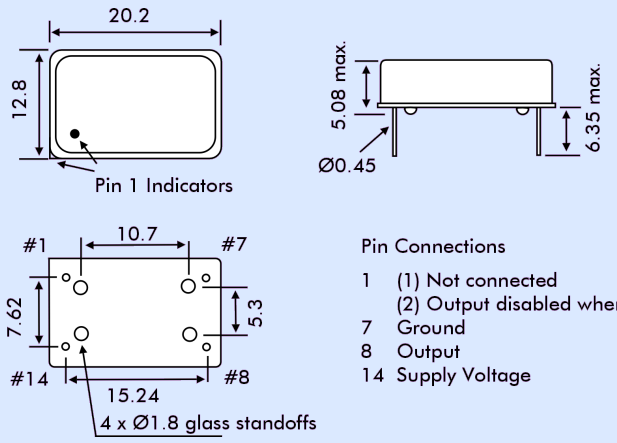
- **Frequency range 1Hz to 160kHz using a tuning fork crystal**
- **Current consumption in µA range**
- **Supply voltage range from +3.0V to +15.0 Volts**
- **32.768kHz ideal for accurate real-time-clock applications**
- **Suitable for battery-operated devices, data loggers etc.**

RoHS

DESCRIPTION

LPO oscillators are ideal for battery operated portable or hand-held consumer electronic devices where low supply current consumption is essential. Applications include data logging and portable test equipment.

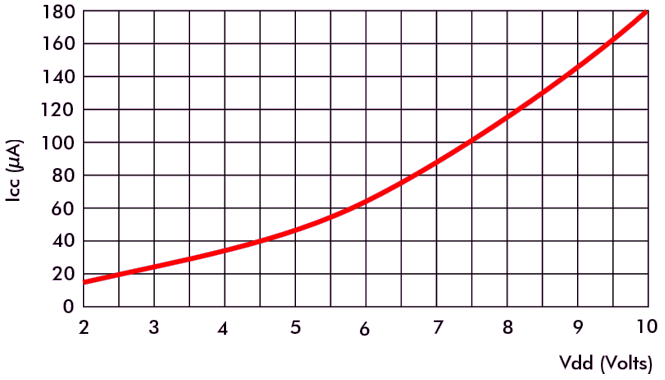
OUTLINE & DIMENSIONS



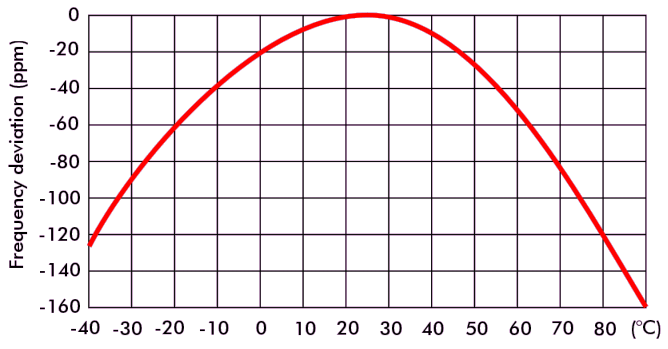
SPECIFICATION

Model:	LPO14
Input Voltage (standard):	+3.3 VDC±5% or +5.0 VDC ±10% *Input voltages from 3.0V to 15.0V are available.*
Frequency Range:	1.0Hz to 160.0kHz
Output Waveform:	HCMOS (square wave)
Frequency Tolerance	
Tolerance code 'P':	±10ppm
Tolerance code 'A':	±25ppm
Tolerance code 'B':	±50ppm
Tolerance code 'C':	±100ppm
Frequency Stability:	-100ppm (typical) over 0° to +70°C -160ppm (typical) over -40° to +85°C
Curent Consumption	
Supply = 3.3 Volts:	26µA typical
Supply = 3.3 Volts:	45µA typical
Output Logic High '1'	
Supply = 3.3 Volts:	2.97V minimum
Supply = 5.0 Volts:	4.50V minimum
Output Logic Low '0'	
Supply = 3.3 Volts:	0.33V maximum
Supply = 5.0 Volts:	0.50V maximum
Rise/Fall Times	
Supply = 3.3 Volts:	0.5µs typical, 1.0µs maximum
Supply = 5.0 Volts:	25µs typical, 50µs maximum
Fanout:	2 CMOS gates
Start-up Time:	450ms maximum
Duty Cycle:	50%±5% typical, 50%±10% maximum
Storage Temperature:	-50° to +100°C
Ageing:	±5ppm per year maximum

CURRENT CONSUMPTION vs. SUPPLY VOLTAGE



TYPICAL FREQUENCY STABILITY vs. TEMPERATURE



PART NUMBERING

Example: 3LPO14G - P - 32.768

- Supply Voltage: 3 = 3.3V, 5 = 5.0V
- Holder type: LPO14
- RoHS Compliance: Add G if RoHS Compliant part required
- Frequency Tolerance (25°C): P = ±10ppm, A = ±25ppm, B = ±50ppm, C = ±100ppm
- Frequency in kHz

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