

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.

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.

SPECIFICATION

Model: LPO14

Input Voltage (standard): $+3.3 \text{ VDC} \pm 5\% \text{ or } +5.0 \text{ VDC} \pm 10\%$

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: 26μ A typical Supply = 3.3 Volts: 45μ A 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: 0.5μ s typical, 1.0μ s maximum Supply = 5.0 Volts: 25μ s typical, 50μ s maximum

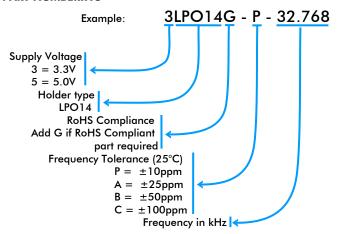
Fanout: 2 CMOS gates
Start-up Time: 450ms maximum

Duty Cycle: 50%±5% typical, 50%±10% maximum

Storage Temperature: -50° to +100°C

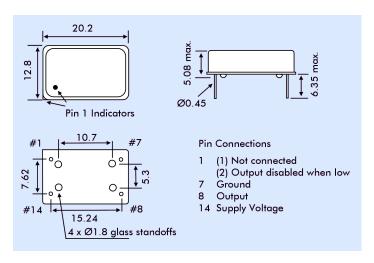
Ageing: ±5ppm per year maximum

PART NUMBERING

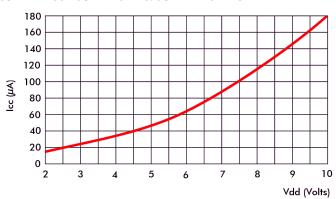


RoHS

OUTLINE & DIMENSIONS



CURRENT CONSUMPTION vs. SUPPLY VOLTAGE



TYPICAL FREQUENCY STABILITY vs. TEMPERATURE

