

# **8 pin DIL Low-Power Oscillator**

# 1.0Hz to 160kHz

#### **FEATURES**

- Frequency range 1Hz to 160kHz using a tuning fork crystal
- Current consumption in  $\mu A$  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: LPO8

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

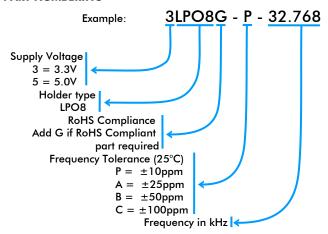
Fanout: 2 CMOS gates Start-up Time: 450ms maximum

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

Storage Temperature: -50° to +100°C

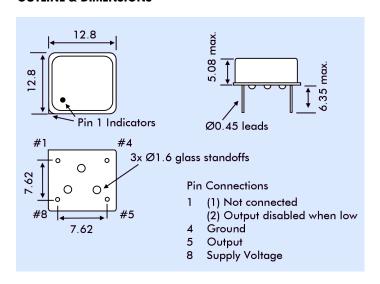
Ageing: ±5ppm per year maximum

## PART NUMBERING

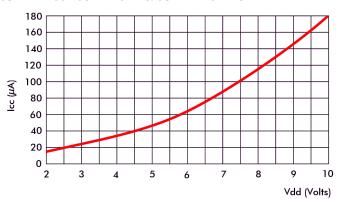




## **OUTLINE & DIMENSIONS**



#### **CURRENT CONSUMPTION vs. SUPPLY VOLTAGE**



## TYPICAL FREQUENCY STABILITY vs. TEMPERATURE

