

## 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.

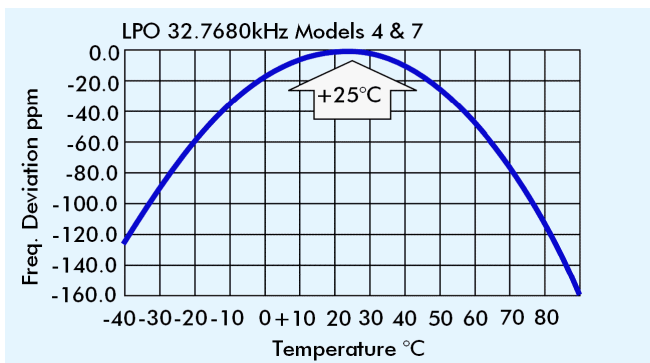
#### FEATURES

- 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

<b>Input Voltage:</b>	<b>+3.3 VDC</b>	<b>+5.0VDC</b>
	+2.0 Volts to +7.0 Volts is available	
<b>Frequency Range:</b>	20kHz to 160kHz (Limited to standard frequencies.)	
<b>Output Logic:</b>	CMOS	
<b>Output Voltage</b>		
<b>CMOS HIGH '1':</b>	2.97V min.	4.0V min.
<b>CMOS LOW '0':</b>	0.33V max.	0.4V max.
<b>Calibration Tolerance:</b>	see table opposite	
<b>Frequency Stability:</b>	see curve opposite	
<b>Current Consumption:</b>	14mA typical	18mA typical
<b>Rise/Fall Times:</b>	25ns typical, 45ns maximum (Measured from 10%Vdd to 90%Vdd)	
<b>Start-up Voltage:</b>	1.60 VDC	
<b>Pin 1 Option, Tristate:</b>	Output is high impedance when LOW	
<b>Duty Cycle:</b>	50%±5% typical, 50%±10% maximum	
<b>Start-up Time:</b>	450ms maximum	
<b>Storage Temperature:</b>	-50° to +100°C	
<b>Ageing:</b>	±5ppm maximum at 25°C	

#### FREQUENCY DEVIATION vs TEMPERATURE



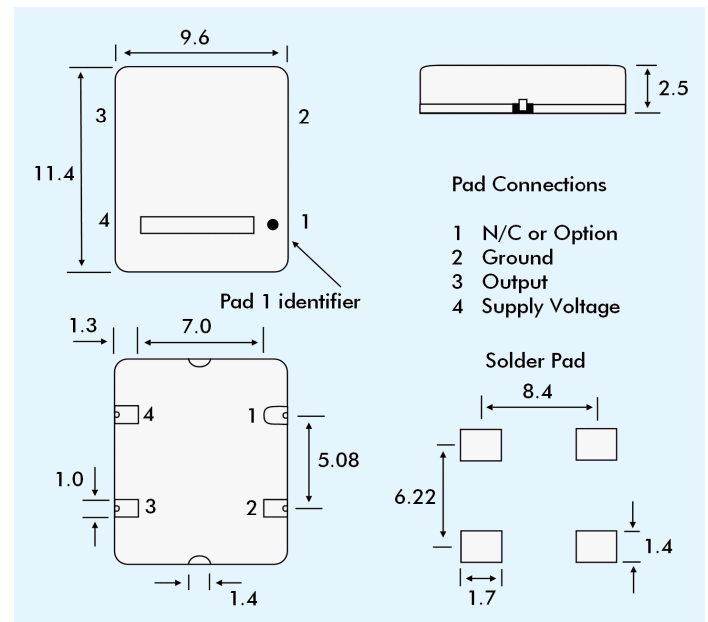
#### KHz RANGE OSCILLATORS mA CURRENT CONSUMPTION

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

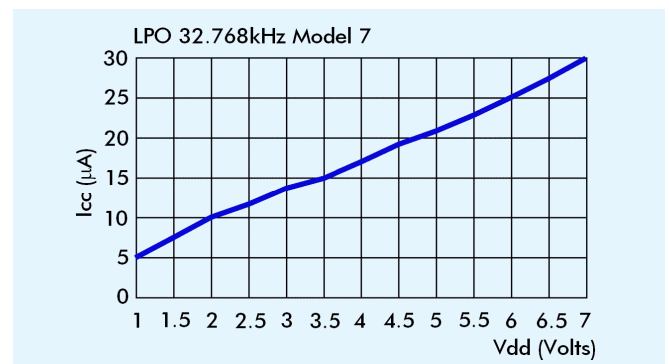
#### STOCK HOLDING AND CUSTOM PARTS

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	Calibration Tolerance at 25°C
P	±10ppm
A	±25ppm
B	±50ppm
C	±100ppm

#### PART NUMBER GENERATION

LPO oscillators part numbers are derived as follows:  
EXAMPLE:

