# **EURO**QUARTZ

# LXOM-AT OSCILLATORS

# Low Power Crystal Oscillator

# 500kHz to 120MHz

### **FEATURES**

- Industry-standard 1/2 size DIP for compatibility
- Low ageing
- Double hermetically sealed package
- Full MILITARY testing available
- Choice of 5.0V or 3.3V supply voltage
- **Optional Enable/Disable or Tristate function**

#### DESCRIPTION

The LXOM-AT oscillator is designed as a highly reliable crystal oscillator able to withstand use in sever environments. The double hermetically sealed package provides a permanently precise control of ouput frequency.

### **SPECIFICATION**

Specifications are typical at 25°C unless otherwise indicated. Tighter specifications are available, contact Euroquartz technical sales. Supply Voltage: +5.0V±5% or +3.3V±5%

Calibration Tolerance				
Code 'A':		±0.01% (±100ppm)		
Code 'B':		±0.03%		
	Code 'C':	±0.10%		
Frequency Stability				
	0° to +50°C:	from ±5 to ±30ppm		
	-10° to +70°C:	from ±10 to ±50ppm		
	-40° to +85°C:	from ±20 to ±100ppm		
	-55° to +125°C:	from ±30 to ±100ppm		
Supply Current:		from 4mA to 60mA		
		(frequency dependent)		
Output Levels 5V (CMOS)				
	VOL:	0.5V max.		
	VOH:	4.5V max.		
Start-up Time:		5ms max.		
Rise/Fall Time:		6ns typical, 10ns maximum		
Duty Cycle:		60/40%		
Ageing first year:		±5ppm max.		
Shock Survival:		1,000g peak 1.0ms, ½ sine		
Vibration Survival:		10g rms 10~2000Hz random		
Operating Temperature Ranges				
	Commercial (C):	-10° to +70°C		
	Industrial (I):	-40° to +85°C		
	Military (M):	-55° to +125°C		

## **ABSOLUTE MAXIMUM RATINGS**

Supply Voltage: Storage Temperature:

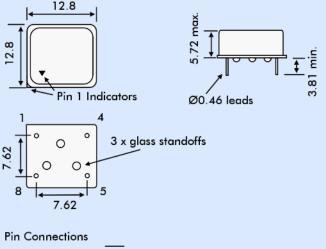
-0.3V to +7.0V -55° to +125°C

## HOW TO ORDER LXOM-AT OSCILLATORS





#### **OUTLINE & DIMENSIONS**



- 1 Output Enable INH (Tri-state) or NC
- 4 Ground, case
- 5 Output
- 8 Supply Voltage

## **ENABLE/DISABLE OPTIONS (E/T/N)**

The LXOM-AT oscillator has these pin options available: 'E' (Enable), when pin 1 is LOW (0), the oscillator stops oscillating. 'T' (Tri-state), when pin 1 is LOW, the oscillator continues to run, hoever, the output buffer amplifier stops functioning and output is in a high impedance (Z) state.

#### **ENABLE vs TRI-STATE**

	Enable	Tri-State
Current consumption when Pin 1 is low	Low	High
Output recovery delay when Pin 1 changes from low to high	Delayed	Immediate

When Pin 1 is allowed to float it is held by an internal pull-up resistor

#### PACKAGING

LXOM-AT oscillators are supplied tube packed.

