

FEATURES

- Low frequency using an AT-cut crystal
- Current consumption in μA range
- Supply voltage range from +1.8 to +5.0Volts
- 32.768kHz standard frequency ideal for accurate real-time-clock applications
- Suitable for battery-operated devices, data loggers etc.

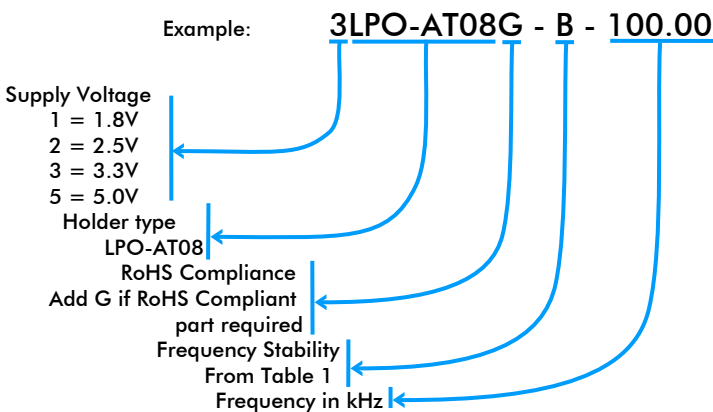
DESCRIPTION

LPO-AT 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.

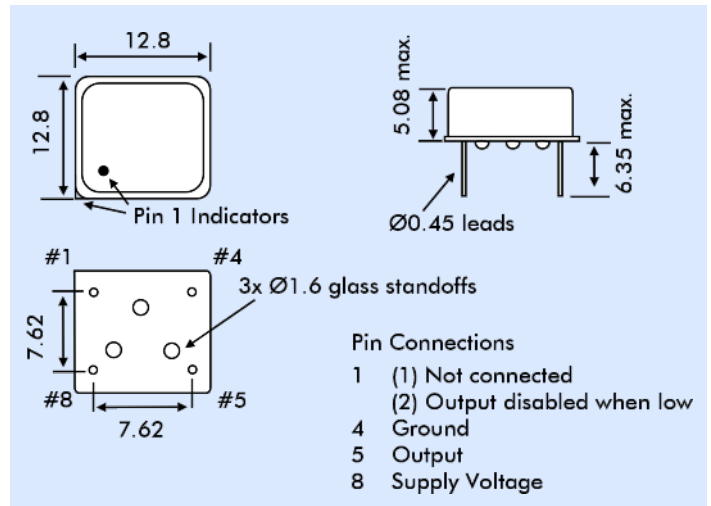
SPECIFICATION

Model:	LPO-AT08
Input Voltage ($\pm 10\%$):	1.8V, 2.5V, 3.3V, 5.0V
Frequency Range:	27.3kHz~100.00kHz
5.0V Supply ONLY:	27.3kHz~52kHz
Output Waveform:	HCMOS (square wave)
Frequency Stability:	See table 1
Current Consumption	
Supply = 1.8 Volts:	32 μA typical, 50 μA maximum
Supply = 2.5 Volts:	32 μA typical, 50 μA maximum
Supply = 3.3 Volts:	33 μA typical, 50 μA maximum
Supply = 5.0 Volts:	36 μA typical, 60 μA maximum
Output Logic High '1':	90% of Supply Voltage
Output Logic Low '0':	10% of Supply Voltage
Rise/Fall Times	
Supply = 1.8 Volts:	20nsec. maximum
Supply = 2.5 Volts:	20nsec. maximum
Supply = 3.3 Volts:	12nsec. maximum
Supply = 5.0 Volts:	12nsec. maximum
Start-up Time:	1.0ms typical, 5.0ms maximum
Duty Cycle:	50% $\pm 5\%$
Storage Temperature:	-55°C to +125°C
Ageing:	$\pm 3\text{ppm}$ maximum first year, $\pm 2\text{ppm}$ maximum per year thereafter
Output Load:	15pF

PART NUMBERING



OUTLINE & DIMENSIONS



Frequency Stability over Operating Temperature Range	$\pm 25\text{ppm}$	$\pm 50\text{ppm}$	$\pm 100\text{ppm}$
Commercial (-10°C to +70°C)	A	B	C
Industrial (-40°C to +85°C)	D	E	F

Table 1; Frequency Stability over Temperature Range