

FEATURES

- **Miniature 7.0 x 5.0 x 1.4mm hermetically-sealed package**
- **Frequency 32.000kHz**
- **Tristate (Enable/Disable) function as standard**
- **Supply voltage 5.0 Volts**



DESCRIPTION

XO91 miniature oscillators consist of a TTL/CMOS-compatible hybrid circuit together with a miniature quartz crystal packaged in a low-profile, industry-standard ceramic package. The high quality design and materials employed provide a highly reliable clock oscillator in a miniature package while mass production methods ensure that the XO91 provides a cost-effective oscillator solution.

SPECIFICATION

Frequency:	32.768kHz
Supply Voltage:	5.0 Volts $\pm 10\%$
Output Logic:	HCMOS/LSTTL
Frequency Stability:	100ppm*
Rise/Fall Time:	4ns typical
Output Voltage:	
HIGH '1':	90%Vdd minimum
LOW '0':	10%Vdd maximum
Output Load	
CMOS:	15pF
TTL:	10 LSTTL loads
Duty Cycle:	50% $\pm 5\%$
Supply Current:	8.0mA typical, 15mA maximum
Operating Temperature:	-10° to +70°C
Storage Temperature:	-40° to +85°C
Startup Time:	2ms typical
Ageing:	± 3 ppm max. per year

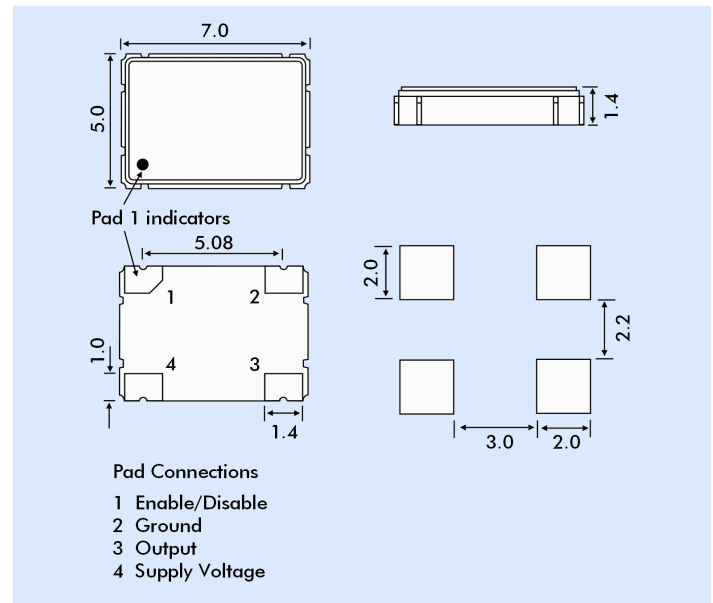
Tristate Function (Pad 1):

Output (Pad 3) is active if Pad 1 is not connected or a voltage to Pad 1 is 'HIGH'. Output is high impedance when 'LOW' or GROUND is applied to Pad 1.

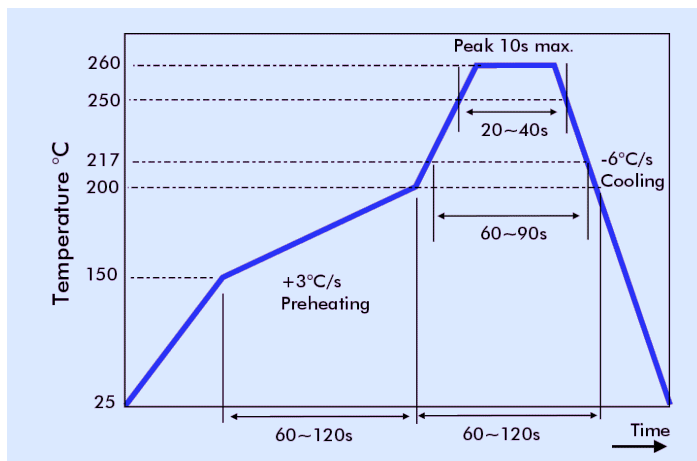
* Frequency stability is inclusive of calibration tolerance at 25°C, frequency change due to shock & vibration, ± 10 supply voltage variation and stability over temperature range.

Note: Parameters are measured at ambient temperature of 25°C, supply voltage as stated and a load of 15pF

OUTLINE & DIMENSIONS



SOLDER TEMPERATURE PROFILE



PART NUMBERING

