EUROQUARTZ

XO91 Oscillators

7 x 5mm SMD Clock Oscillator — 312.5kHz to 160MHz

FEATURES

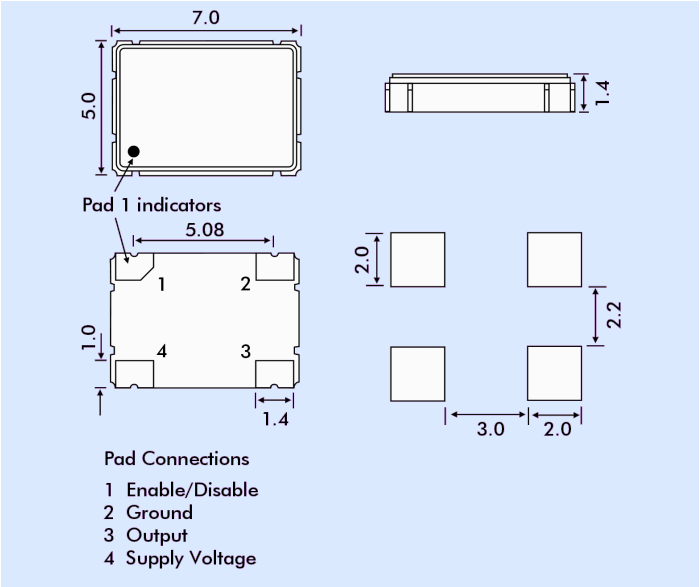
- **Miniature 7.0 x 5.0 x 1.4mm, hermetically-sealed package**
- **Frequency Range 312.5kHz to 160MHz**
- **Tristate (Enable/Disable) function as standard**
- **Supply voltage range: 1.0, 1.2, 1.8, 2.5, 3.3 or 5.0 Volts**
- **High ouput load version (50pF) available**

RoHS

DESCRIPTION

XO91 oscillators consist of a TTL/CMOS-compatible hybrid circuit together with a miniature quartz crystal packaged in a low-profile, industry-standard 7 x 5mm ceramic package. The high quality design and build quality of the XO91 provides a stable and reliable clock oscillator. XO91 supply voltage range is from 1.0 to 5.0 Volts.

OUTLINE & DIMENSIONS



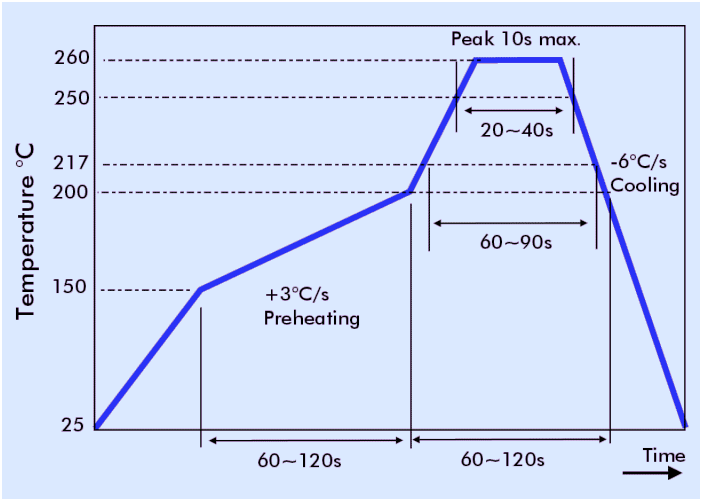
SPECIFICATION

Frequency Range:	312.5kHz to 125.0MHz
Supply Voltage:	1.0, 1.2, 1.8, 2.5, 3.3 Volts±5% or 5.0 Volts ±10%
Output Logic:	HCMOS/LSTTL
Frequency Stability*	
0° to +50°C:	from ±10ppm
-20° to +70°C:	from ±15ppm
-40 to +85°C:	from ±25ppm
-55° to +105°C:	from ±100ppm
Rise/Fall Time:	*see table*
Output Voltage:	
HIGH '1':	90%Vdd minimum
LOW '0':	10%Vdd maximum
Output Load:	15pF (30pF and 50pF available for supply voltages 3.3 and 5.0 Volts)
Duty Cycle:	50%±5% typical
Supply Current:	*See table*
Rise/Fall Times:	*See table*
Operating Temperature	0~70°C (Commercial) -40~+85°C (Industrial) -55~+105°C (Military)
Startup Time	
312.5kHz to 32MHz:	5ms max.
32MHz+ to 160MHz:	10ms max. (to reach 90% amplitude at 25±2°C)
Ageing:	±5ppm max. In first year
Phase Jitter RMS:	<1ps typical
Enable Time:	100ms max.
Disable Time:	100ns max.
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

SOLDER TEMPERATURE PROFILE



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