EUROQUARTZ

XOW91 Series Oscillators

7 x 5mm High Frequency HCMOS Oscillator 125MHz to 800MHz

FEATURES

- **Industry-standard 7.0 x 5.0mm package**
- **High frequency range 125MHz to 800MHz**
- **High frequency range at low cost**
- **Supply voltage 3.3Volts**
- **Tristate function to conserve power**

RoHS

DESCRIPTION

XOW91 series oscillators are designed to provide a high quality HCMOS output at high frequencies from 125MHz to 800MHz. Phase and RMS period jitter are kept within low limits. An enable/disable function is standard and the oscillator may also be specified with a power down function.

SPECIFICATION

Frequency Range:	125.0MHz to 800.0MHz
Output Logic:	HCMOS
Integrated Phase Jitter:	2.6ps typical for 155.520MHz
RMS Period Jitter:	4.3ps typical for 155.520MHz
Period Jitter Peak to Peak:	27ps typical for 155.520MHz
Frequency Stability	
Commercial:	±25ppm to ±100ppm -10° to +70°C
Industrial:	±25ppm to ±100ppm -40° to +85°C
Input Voltage:	+2.5V to +3.3VDC ±10%
Output Voltage	
High '1':	90% Vdd minimum
Low '0':	10% Vdd maximum
Rise/Fall Time:	2.4ns typical (20%Vdd to 80%Vdd, 15pF load)
Current Consumption:	40mA maximum (15pF load)
Load:	15pF
Start-up Time:	5ms typical, 10ms maximum
Duty Cycle:	50% ±5% (Measured at 50% Vdd)
Input Static Discharge Protection:	2kV minimum
Ageing:	±2pmm per year maximum

ABSOLUTE MAXIMUM RATINGS

Permanent damage may occur if units are operated beyond specified limits.

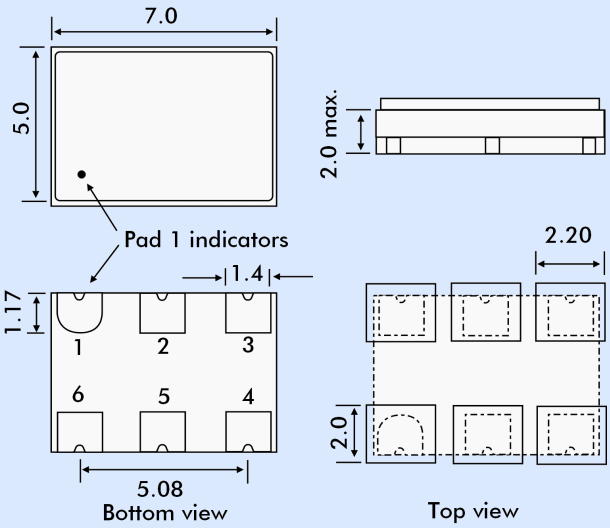
Supply Voltage:	+4.6 VDC max.
Input Voltage Vi:	Vss-0.5 min., Vdd +0.5V max.
Input Voltage Vo:	Vss-0.5 min., Vdd +0.5V max.

PART NUMBER SCHEDULE

Example: 200.00MHz XOV91050UCTB

Frequency
Series Designation XOV91
Stability
100 = ±100ppm
050 = ±50ppm
025 = ±25ppm
Output Universal
Operating Temp. Range
C = Commercial (-10°~70°C)
I = Industrial (-40°~+85°C)
Output Option
T=Tristate (enable/disable) P= Powerdown*
Supply Voltage
A = 3.3 Volts
B = 2.5 Volts

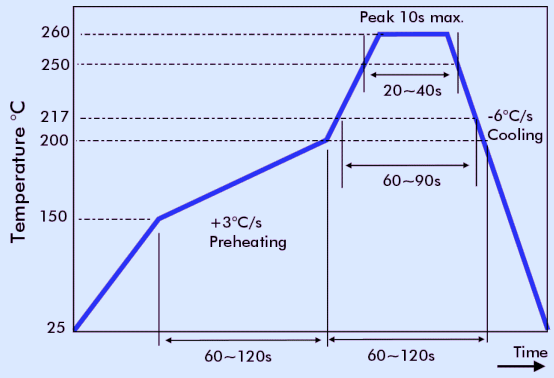
OUTLINE & DIMENSIONS



Pad Connections

1 Not Connected
2 Enable/Disable (Tristate)
3 Ground
4 Output
5 Not connected
6 Supply Voltage

SOLDER TEMPERATURE PROFILE



TRISTATE OPTIONS

DISABLE	Output is disabled when Pad 1 is taken below 0.3 Vcc referenced to ground Oscillator continues to run while disabled.
ENABLE	Oscillator is enabled when Pad 1 is taken above 0.7 Vcc referenced to ground.
POWER DOWN	Available by special request: Oscillator shuts down when disabled. Longer time to enable.

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