FEATURES

- Industry-standard 6 pad 7.0 x 5.0mm package
- Frequency Range 125MHz to 200MHz
- High frequency range at low cost
- Supply voltage 2.5V or 3.3Volts
- Tristate function to conserve power

DESCRIPTION

XOV576 are 6 pad SMD oscillators designed to provide a high quality HCMOS output at frequencies from 125MHz to 200MHz. 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

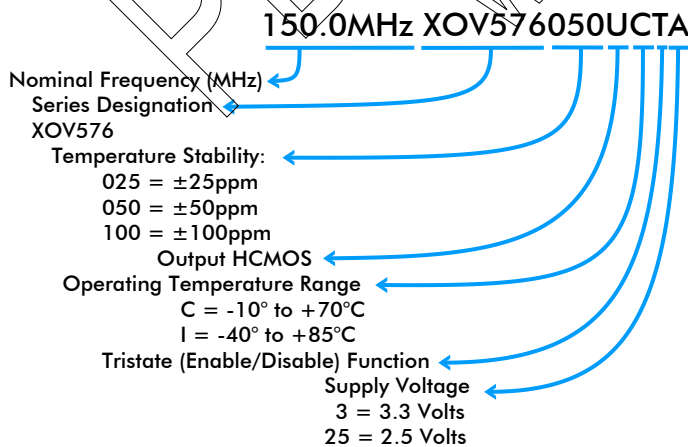|	
Frequency Range:	125.0MHz to 200.0MHz
Output Logic:	HCMOS
Phase Jitter:	3.5ps typical
RMS Period Jitter:	4.0ps typical
Frequency Stability	
Commercial:	±25ppm to ±100ppm -10° to +70°C
Industrial:	±25ppm to ±100ppm -40° to +85°C
Input Voltage:	+2.5V to +3.3VDC ±10%
Output Voltage	
High '1':	+2.97V minimum
Low '0':	+0.33 V maximum
Rise/Fall Time:	0.25ns typical, 0.5ns max. (20%Vdd to 80%Vdd)
Current Consumption:	80mA typical (Frequency dependent)
Load:	15pF
Start-up Time:	5ms typical, 10ms maximum
Duty Cycle:	50% ±5% (Measured at Vdd-1.3V)
Input Static Discharge Protection:	2kV maximum
Ageing:	±2pmm per year maximum

ABSOLUTE MAXIMUM RATINGS

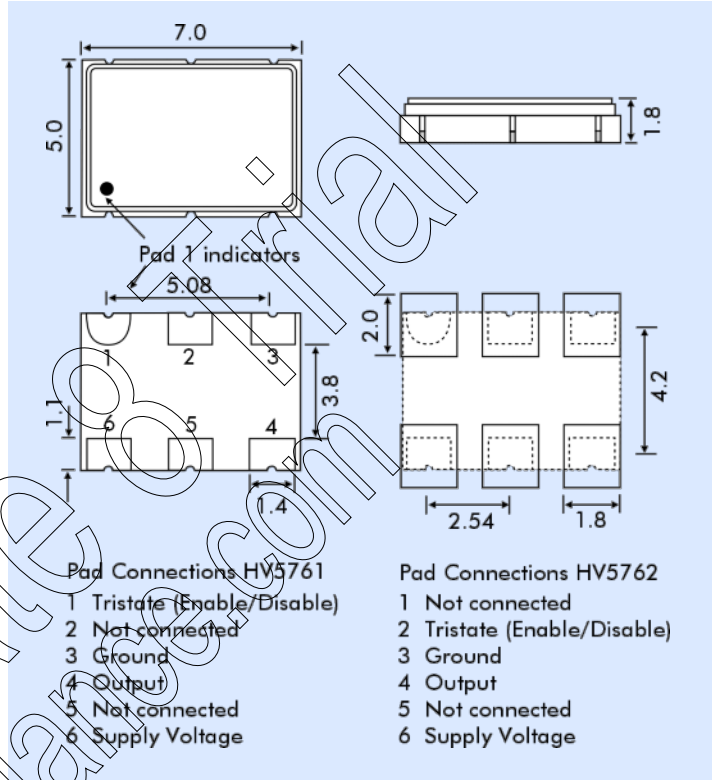**Permanent damage may occur if units are operated beyond specified limits.**

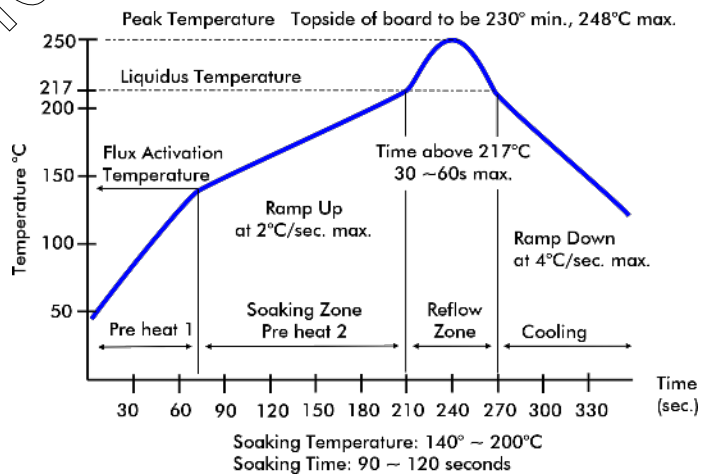|	
Supply Voltage:	+4.6 VDC max.
Input Voltage Vi:	Vss-0.5 min., Vdd +0.5V max.
Input Voltage Vo:	Vss-0.5 min., Vdd +0.5V max.

PART NUMBER SCHEDULE

Example: 150.0MHz XOV576050UCTA

150.0MHz XOV576050UCTA

Nominal Frequency (MHz)
Series Designation XOV576
Temperature Stability:
025 = ±25ppm
050 = ±50ppm
100 = ±100ppm
Output HCMOS
Operating Temperature Range
C = -10° to +70°C
I = -40° to +85°C
Tristate (Enable/Disable) Function
Supply Voltage
3 = 3.3 Volts
25 = 2.5 Volts

OUTLINE & DIMENSIONS

Pad 1 indicators

Pad Connections HV5761
1 Tristate (Enable/Disable)
2 Not connected
3 Ground
4 Output
5 Not connected
6 Supply Voltage

Pad Connections HV5762
1 Not connected
2 Tristate (Enable/Disable)
3 Ground
4 Output
5 Not connected
6 Supply Voltage

SOLDER TEMPERATURE PROFILE

Peak Temperature Topside of board to be 230° min., 248°C max.
Liquidus Temperature
Flux Activation Temperature
Time above 217°C 30 ~60s max.
Ramp Up at 2°C/sec. max.
Ramp Down at 4°C/sec. max.
Pre heat 1
Soaking Zone Pre heat 2
Reflow Zone
Cooling
Soaking Temperature: 140° ~ 200°C
Soaking Time: 90 ~ 120 seconds

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.