

## 7 x 5mm SMD High Frequency Clock Oscillator

### FEATURES

- Industry-standard 7.0 x 5.0mm package
- Frequency Range 125MHz to 200MHz
- High Q crystal and multiplier circuit for low cost applications
- Supply voltage 3.3 Volts
- Tristate function to conserve power



### DESCRIPTION

XOV91 series oscillators are designed to provide a high quality HCMOS output at high frequencies from 125MHz to 200MHz. Phase noise 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:	LVC MOS
Integrated Phase Jitter:	2.3ps typical 4.0ps max (12kHz ~ 20MHz) at 155.520MHz
Period Jitter RMS:	4.0ps typical at 155.520MHz
Period Jitter Peak to Peak:	27ps typical at 155.520MHz
Frequency Stability	
Commercial:	±10ppm to ±100ppm -10° to +70°C
Industrial:	±20ppm to ±100ppm -40° to +85°C
Supply Voltage:	+3.3VDC ±5%
Output Voltage	
High '1':	90% Vdd minimum
Low '0':	10% Vdd minimum
Rise/Fall Time:	2.4ns typical, 15pF load. (20%Vdd to 80%Vdd)
Current Consumption:	25mA max.
Load:	15pF
Start-up Time:	5ms typical, 10ms maximum
Duty Cycle:	50% ±5%
Static Discharge Protection:	2kV maximum
Ageing:	±2ppm per year maximum

### PHASE NOISE

Offset	Frequency 155.250MHz
10Hz	-65 dBc/Hz
100Hz	-95 dBc/Hz
1kHz	-120 dBc/Hz
10kHz	-128 dBc/Hz
100kHz	-122 dBc/Hz
1MHz	-120 dBc/Hz
10MHz	-140 dBc/Hz

### ABSOLUTE MAXIMUM RATINGS

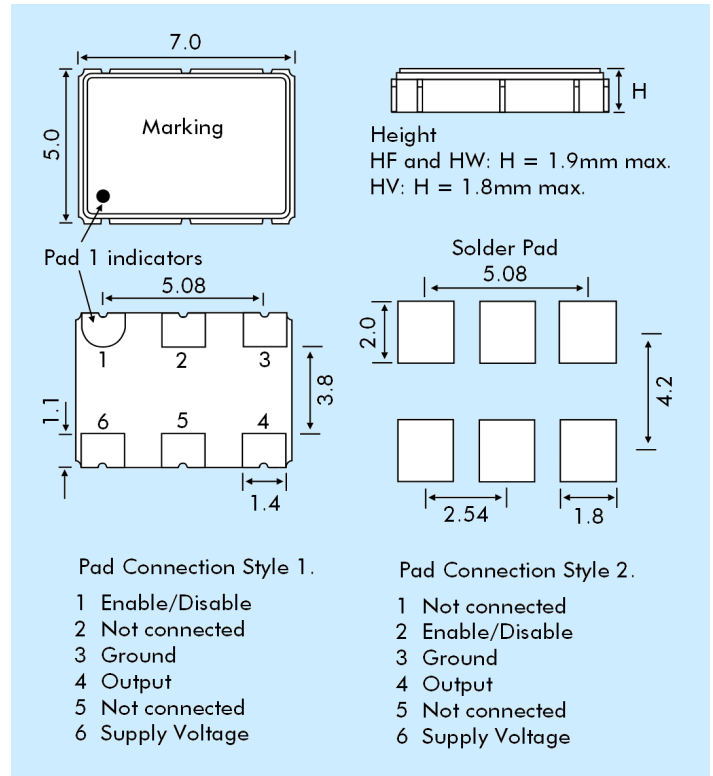
**Permanent damage may occur if units are operated beyond specified limits.**

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.

### PAD 1 OPTIONS

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

### OUTLINE & DIMENSIONS



### PART NUMBER SCHEDULE

Example: **200.00MHz XOY91050UCTA2**

