

## General Description

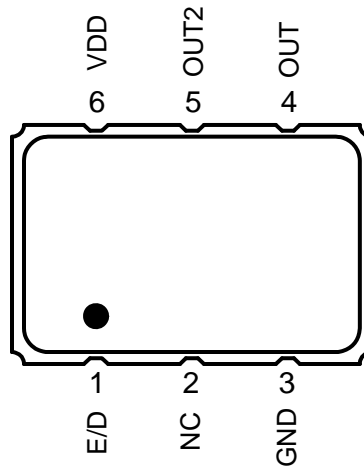
The XUN is an Ultra Precision HCSL Crystal Oscillator with 300fs typical phase jitter over 12kHz to 20 MHz bandwidth. Available in a wide frequency range from 16kHz to 670MHz, the IDT XUN Series Crystal Oscillator utilizes a family of proprietary ASICs, with a key focus on noise reduction technologies.

The 4th order Delta Sigma Modulator reduces noise to the levels that are comparable to traditional Bulk Quartz and SAW oscillators. With short lead-time, low cost, low noise, wide frequency range, excellent ambient performance, the XUN is an excellent choice over the conventional technologies. The XUN has stabilities as tight as  $\pm 20\text{ppm}$  with extremely quick delivery for both standard and custom frequencies

## Features

- Frequency range: 0.016MHz to 670MHz
- Output Type: HCSL
- Frequency Stability:  $\pm 20\text{ppm}$ ,  $\pm 25\text{ppm}$ ,  $\pm 50\text{ppm}$ , or  $\pm 100\text{ppm}$
- Supply Voltage: 1.8V, 2.5V, or 3.3V
- Phase Jitter (1.875MHz to 20MHz): 100fs typical
- Phase Jitter (12kHz to 20MHz): 300fs typical
- Package options: 5.0mm x 3.2mm x 1.2mm (JS6)  
7.0mm x 5.0mm x 1.3mm (JU6)
- Operating Temperatures:  $-20^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$  or  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$

## Pin Assignment



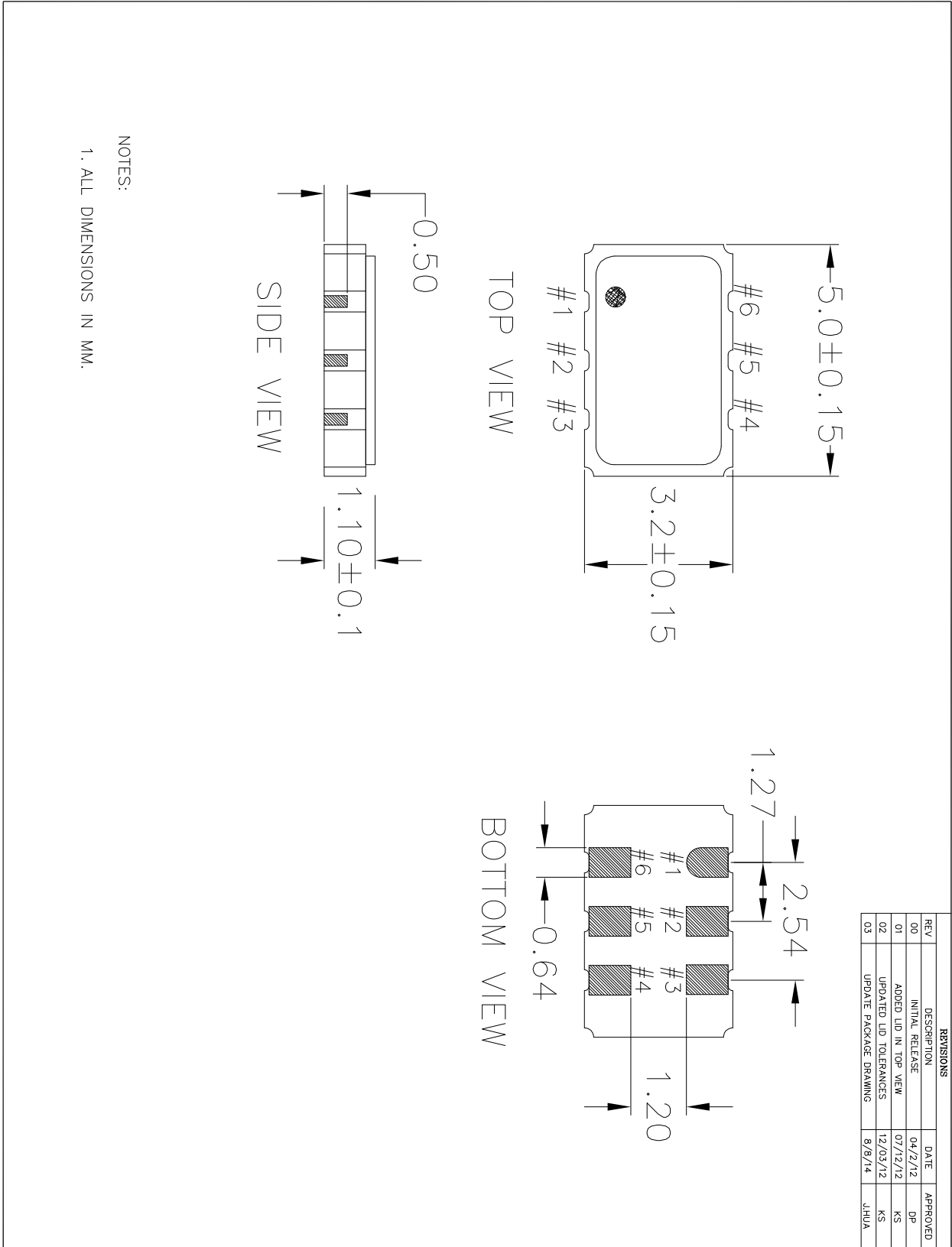
6-pin CLCC

## Pin Descriptions

Pin Number	Pin Name	Description
1	E/D	Enable/Disable <sup>1</sup> (0=Output Disabled)
2	NC	No connect
3	GND	Connect to ground
4	OUT	Output
5	OUT2	Complementary output
6	VDD	Supply Voltage

1. Pulled high internally.

# JS6 Package Outline and Dimensions



# JU6 Package Outline and Dimensions

