

General Description

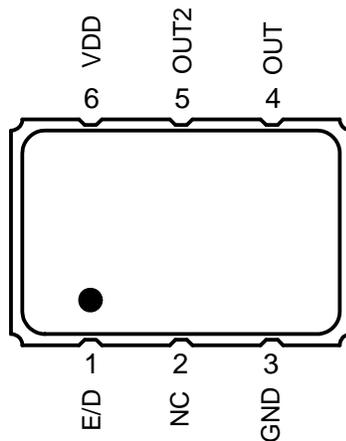
The XLL is an LVDS Crystal Oscillator with 0.89ps typical phase jitter over 12kHz to 20 MHz bandwidth. Available in a wide frequency range from 0.750MHz to 1350MHz, the IDT XLL Series Crystal Oscillator utilizes a family of proprietary ASICs, with a key focus on noise reduction technologies.

The 3rd 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 XLL is an excellent choice over the conventional technologies. The XLL has stabilities as tight as ± 20 ppm with extremely quick delivery for both standard and custom frequencies

Features

- Frequency range: 0.750MHz to 1350MHz
- Output Type: LVDS
- Frequency Stability: ± 20 ppm, ± 25 ppm, ± 50 ppm, or ± 100 ppm
- Supply Voltage: 2.5V or 3.3V
- Phase Jitter (1.875MHz to 20MHz): 225fs typical
- Phase Jitter (12kHz to 20MHz): 0.89ps typical
- Package options: 3.2mm x 2.5mm x 1.0mm (JX6)
5.0mm x 3.2mm x 1.2mm (JS6)
7.0mm x 5.0mm x 1.3mm (JU6)
- Operating Temperatures: -20°C to $+70^{\circ}\text{C}$ or -40°C to $+85^{\circ}\text{C}$

Pin Assignment



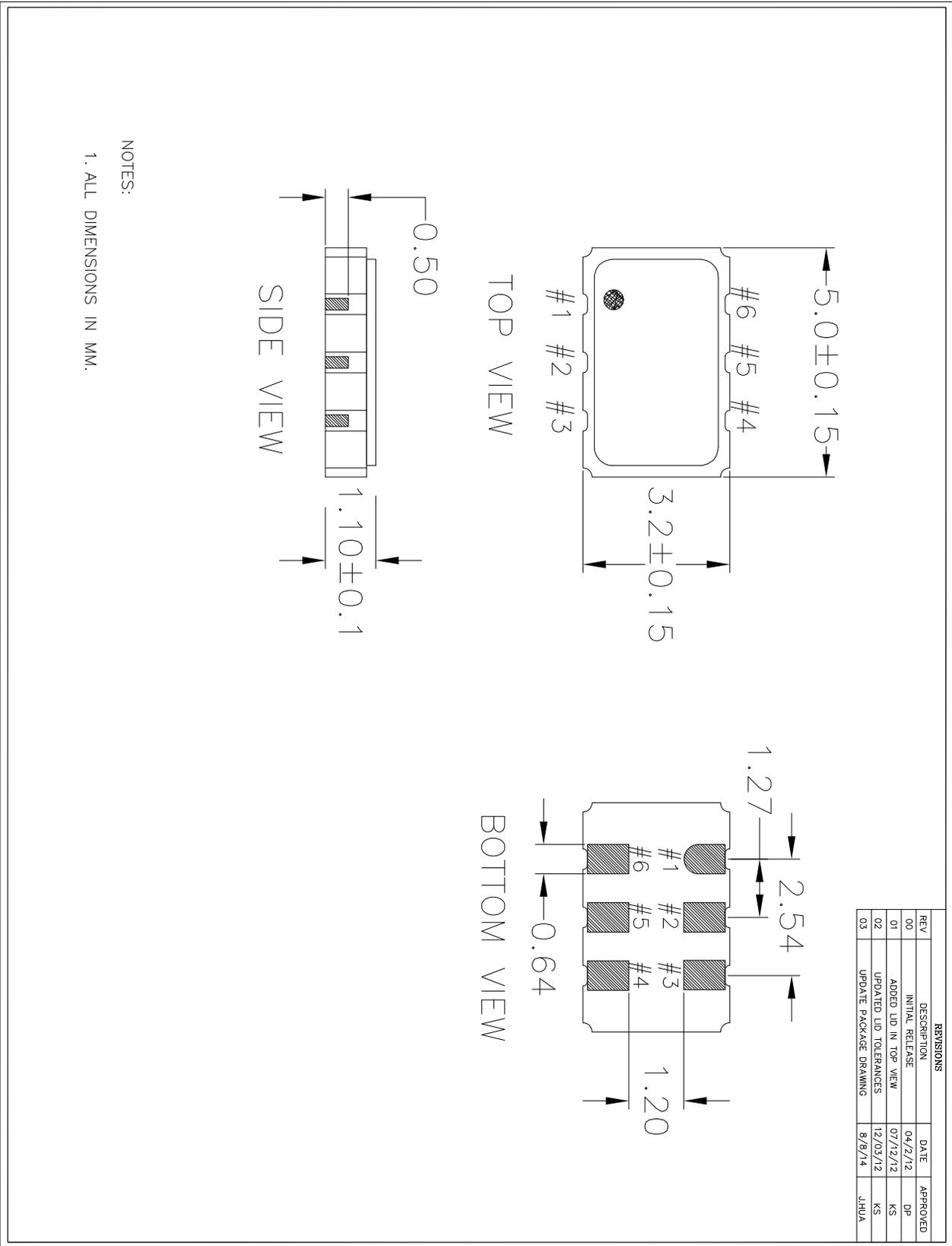
6-pin CLCC

Pin Descriptions

| Pin Number | Pin Name | Description |
|------------|----------|---|
| 1 | E/D | Enable/Disable ¹ (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.

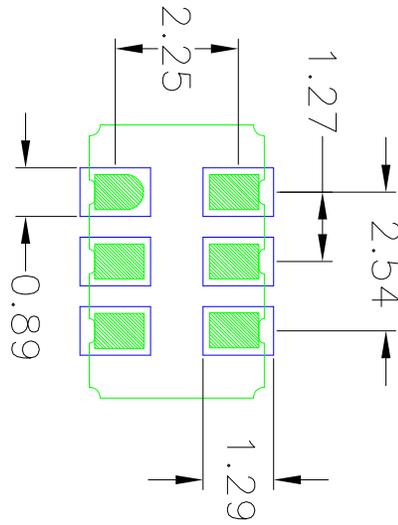
JS6 Package Outline and Dimensions



SHENZHEN YIJIN ELECTRONICS CO: LTD TEL: 0755-27876565

18924600166 QQ: 857950243 <http://www.vc-tcxo.com>

JS6 Package Outline and Dimensions (cont.)



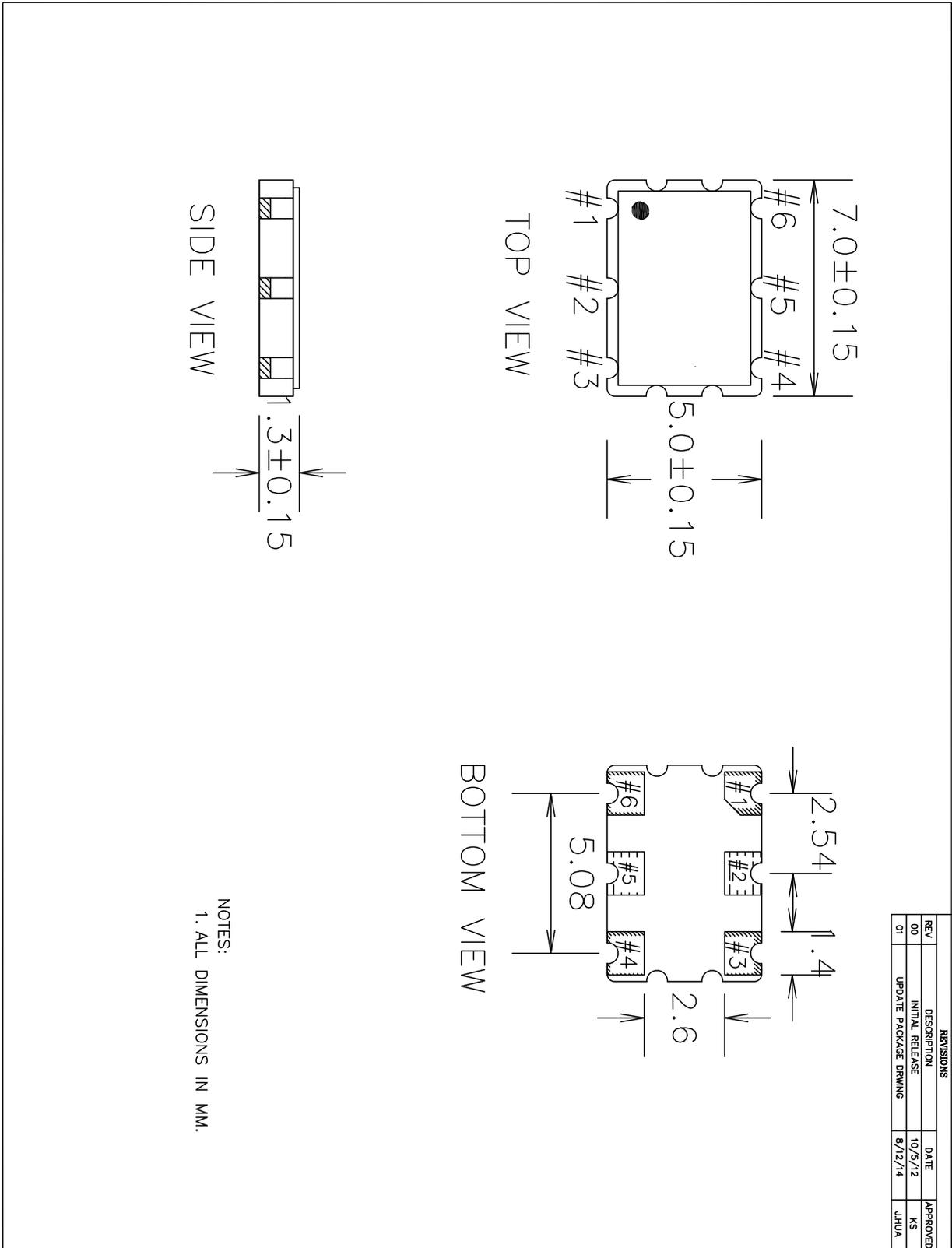
RECOMMENDED LAND PATTERN

NOTES:

1. ALL DIMENSION ARE IN mm. ANGLES IN DEGREES.
2. TOP DOWN VIEW, AS VIEWED ON PCB.
3. COMPONENT OUTLINE SHOW FOR REFERENCE IN GREEN.
4. LAND PATTERN IN BLUE. NSMD PATTERN ASSUMED.
5. LAND PATTERN RECOMMENDATION PER IPC-7351B GENERIC REQUIREMENT FOR SURFACE MOUNT DESIGN AND LAND PATTERN.

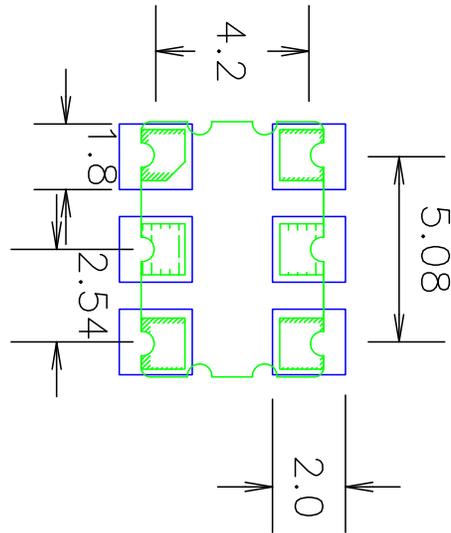
| REVISIONS | | | |
|-----------|------------------------|----------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| 00 | INITIAL RELEASE | 04/27/12 | DP |
| 01 | ADDED LID IN TOP VIEW | 07/12/12 | KS |
| 02 | UPDATED LID TOLERANCES | 12/03/12 | KS |
| 03 | UPDATE PACKAGE DRAWING | 8/8/14 | JHUA |

JU6 Package Outline and Dimensions



NOTES:
1. ALL DIMENSIONS IN MM.

JU6 Package Outline and Dimensions (cont.)

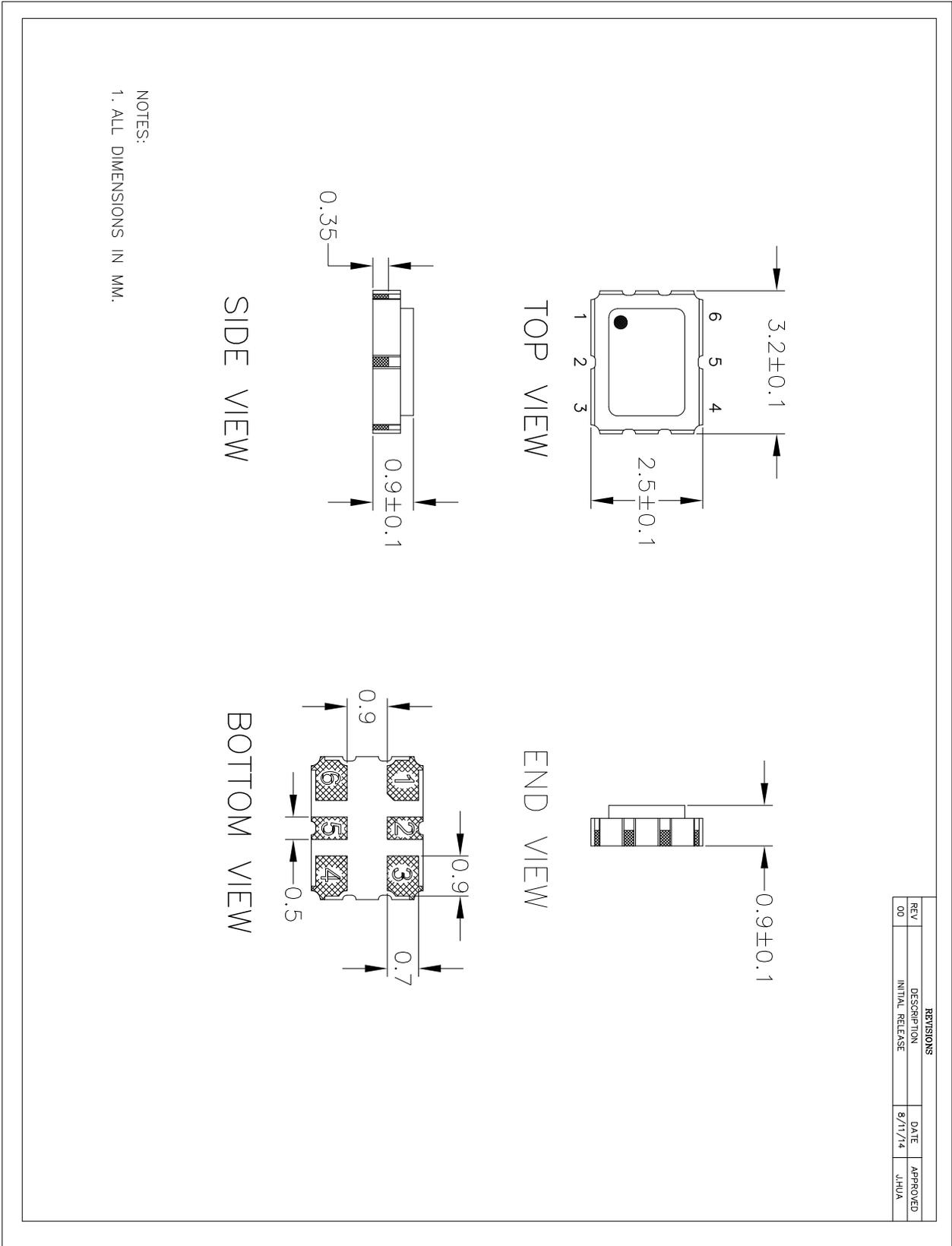


RECOMMENDED LAND PATTERN

- NOTES:
1. ALL DIMENSION ARE IN mm. ANGLES IN DEGREES.
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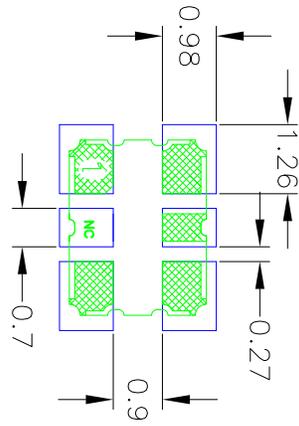
| REVISIONS | | | |
|-----------|------------------------|---------|----------|
| REV | DESCRIPTION | DATE | APPROVED |
| 00 | INITIAL RELEASE | 10/5/12 | KS |
| 01 | UPDATE PACKAGE DRAWING | 8/12/14 | JHUA |

JX6 Package Outline and Dimensions



JX6 Package Outline and Dimensions (cont.)

| REVISIONS | | | DATE | APPROVED |
|-----------|-----------------|--|---------|----------|
| REV | DESCRIPTION | | | |
| 00 | INITIAL RELEASE | | 8/11/14 | JHUA |



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