

General Description

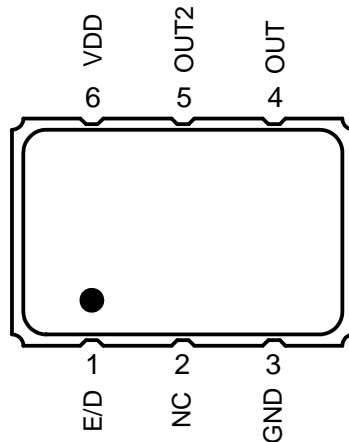
The XLP is an LVPECL Crystal Oscillator with 860fs typical phase jitter over 12kHz to 20 MHz bandwidth. Available in a wide frequency range from 0.750MHz to 1350MHz, the IDT XLP Series Crystal Oscillator utilizes a family of proprietary ASICs, with a key focus on noise reduction technologies.

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 XLP is an excellent choice over the conventional technologies. The XLP has stabilities as tight as $\pm 20\text{ppm}$ with extremely quick delivery for both standard and custom frequencies

Features

- Frequency range: 0.750 to 1350 MHz
- Output Type: LVPECL
- Frequency Stability: $\pm 20\text{ppm}$, $\pm 25\text{ppm}$, $\pm 50\text{ppm}$, or $\pm 100\text{ppm}$
- Supply Voltage: 2.5V or 3.3V
- Phase Jitter (1.875MHz to 20MHz): 225fs typical
- Phase Jitter (12kHz to 20MHz): 860fs typical
- Package options: 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



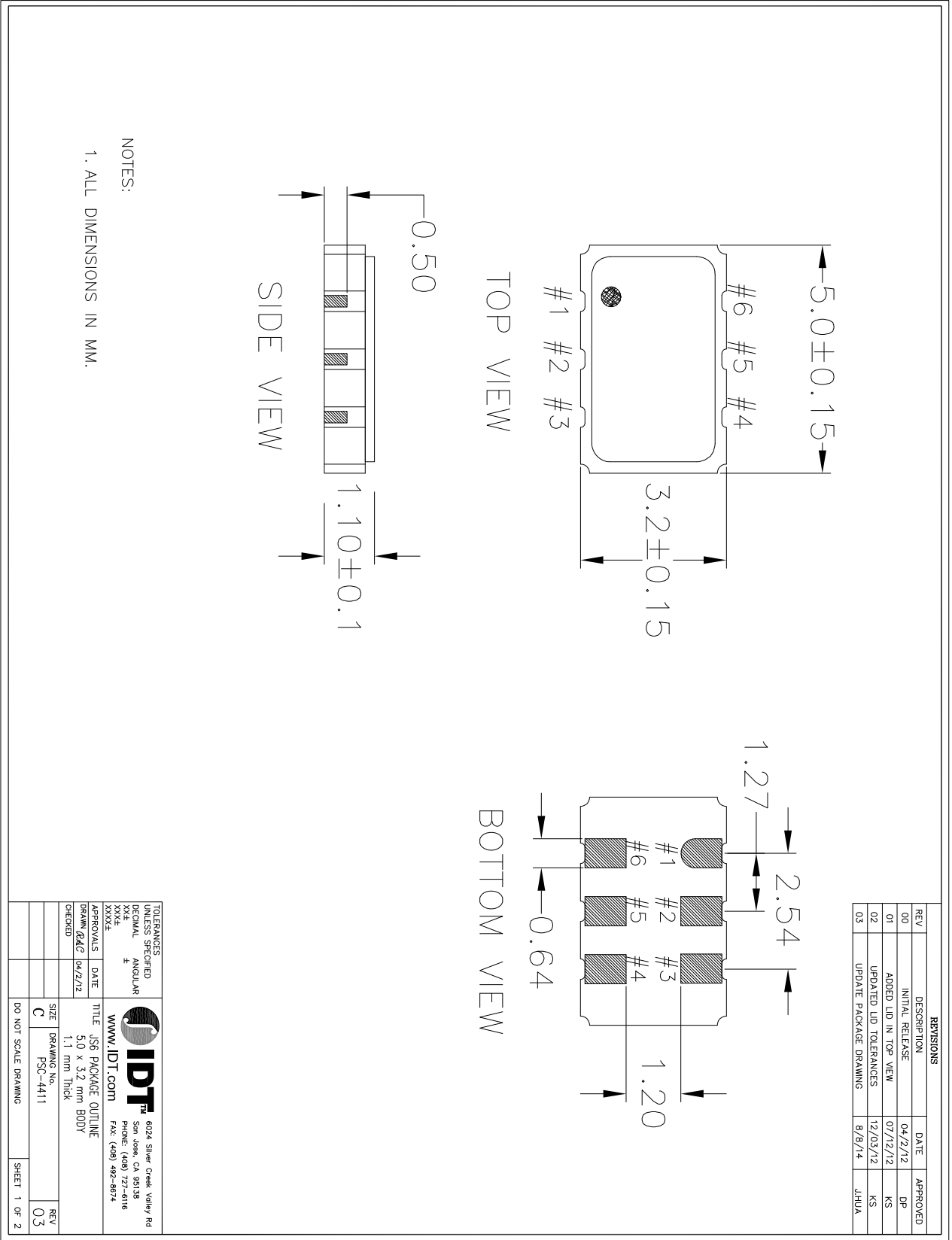
6-pin CLCC

Pin Descriptions

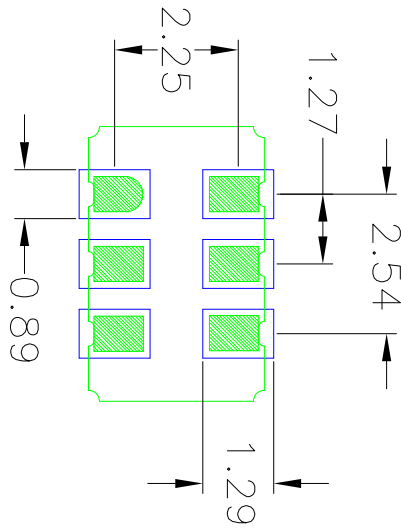
Pin Number	Pin Name	Description
1	E/D	Enable/Disable ¹ (0=Output Disabled)
2	NC	No connect
3	GND	Connect to ground
4	OUT	Output
5	OUT2	Complementary Output
6	VDD	Supply voltage

1. Pulled high internally.

JS6 Package Outline and Dimensions



JS6 Package Outline and Dimensions (cont.)



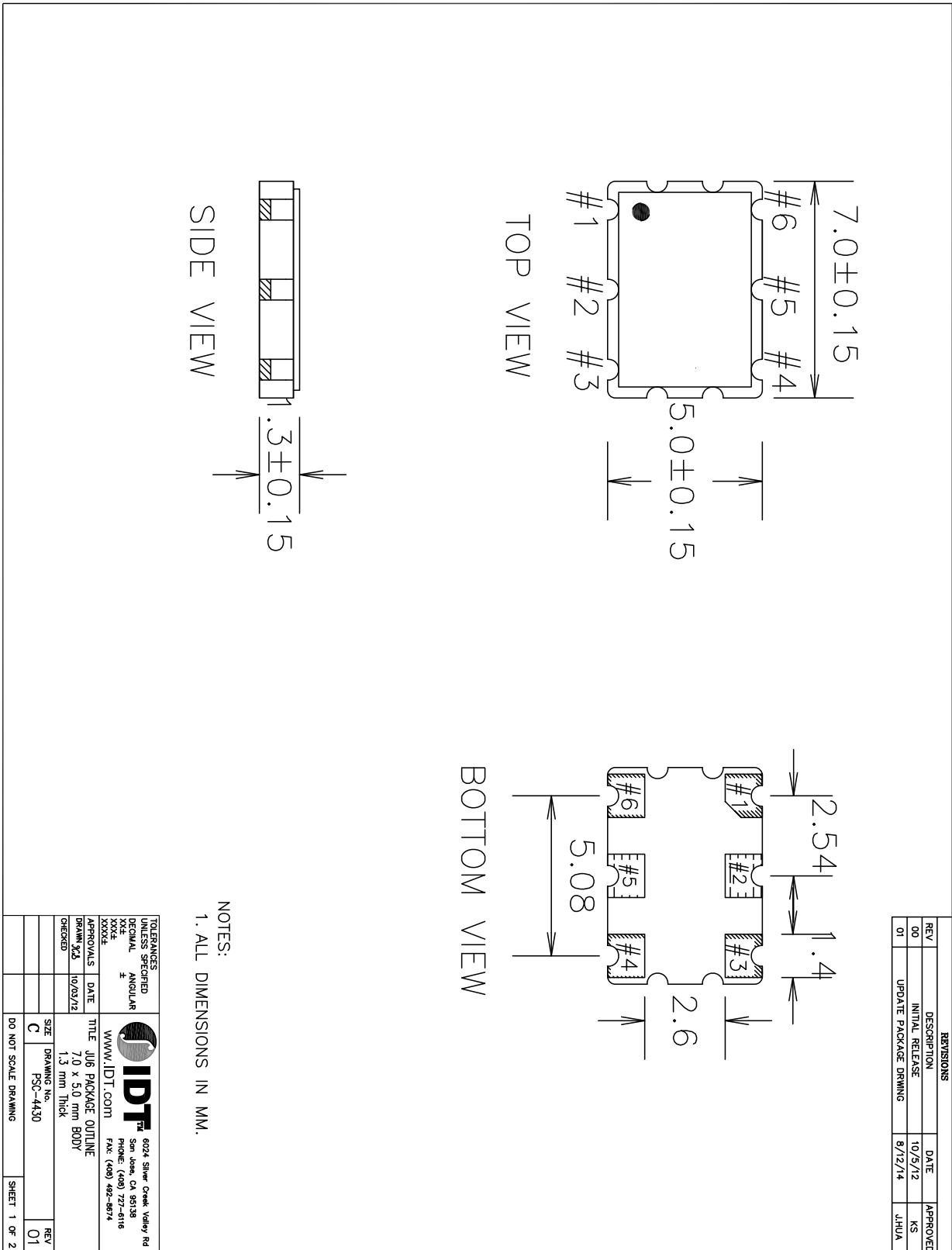
RECOMMENDED LAND PATTERN

- 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	04/2/12	GP
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

TOLERANCES UNLESS SPECIFIED			6024 Silver Creek Valley Rd San Jose, CA 95138 PHONE: (408) 727-4816 FAX: (408) 492-8974
FRONT VIEW	±0.15mm		
SIDE VIEW	±0.25mm	WWW.IDT.COM	TITLE JS6 PACKAGE OUTLINE SIZE 3.0 x 3.2 mm BODY FINISH 1.1 mm THICK
DATE	04/2/12	DRAWING No. PSC-4411	REV 03
SIZE	C	DO NOT SCALE DRAWING	SHEET 2 OF 2

JU6 Package Outline and Dimensions

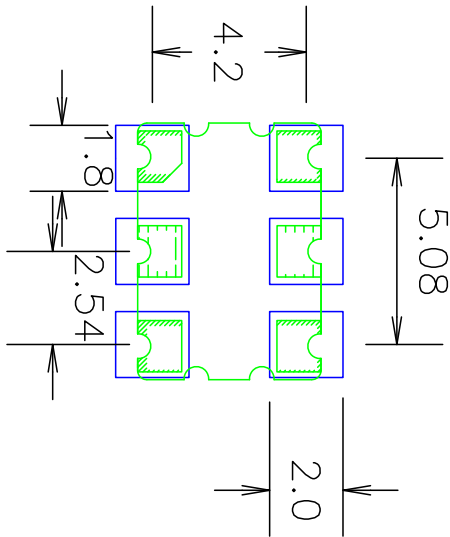


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	10/5/12	KS
01	UPDATE PACKAGE DRAWING	8/12/14	JHUA

NOTES:
1. ALL DIMENSIONS IN MM.

TOLERANCES UNLESS SPECIFIED		<p>6024 Silver Creek Valley Rd San Jose, CA 95138 PHONE: (408) 727-6116 FAX: (408) 482-8674</p>
DECIMAL	ANGULAR	
XXX	Z	
XXXX		
APPROVALS	DATE	TITLE
DRWN: XJA	10/03/12	JU6 PACKAGE OUTLINE
CHECKED:		7.0 x 5.0 mm BODY
		1.3 mm THICK
	SIZE	DRAWING NO.
	C	F3C-4430
		REV
		01
DO NOT SCALE DRAWING		SHEET 1 OF 2

JU6 Package Outline and Dimensions (cont.)



RECOMMENDED LAND PATTERN

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00	INITIAL RELEASE	10/5/12	KS
01	UPDATE PACKAGE DRAWING	8/12/14	JHVA

TOLERANCES UNLESS SPECIFIED		ANGULAR	
DECIMAL	±	±	
XXXX			
APPROVALS	DATE	6024 Silver Creek Valley Rd San Jose, CA 95138 PHONE: (408) 727-8918 FAX: (408) 482-8918 WWW.IDT.COM	
DRAWN XJA	10/03/12	TITLE JU6 PACKAGE OUTLINE SIZE 7.0 x 5.0 mm BODY THICK 1.3 mm Thick DRAWING No. PSC-4430	
CHECKED		SIZE	REV
		C	01
DO NOT SCALE DRAWING		SHEET 2 OF 2	