

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



SPECIFICATION FOR APPROVAL

CUSTOMER _____

NOMINAL FREQUENCY 180.550000 MHz

PRODUCT TYPE TYPE UX 5.0x3.2 SEAM SEALED CRYSTAL CLOCK OSCILLATOR

SPEC. NO. (P/N) UX52I0501Z

CUSTOMER P/N _____

ISSUE DATE January 22, 2015

VERSION 01

APPROVED	PREPARED	QA
Brenda	Clarie	Song Yang
APPROVED BY CUSTOMER :		AVL Status
Please return one copy with approval to PSE-TW		

PSE Technology Corporation

No.2, Tzu-Chiang 5th Rd, Chung Li Industrial Park,
Chung Li City, Taoyuan County, Taiwan (R.O.C.)
TEL: 886-3-451-8888
FAX: 886-3-461-3865
<http://www.saronix-ecera.com.tw>

*RoHS Exception

*HF-Halogen Free

*REACH Compliant

*** A company of  PERICOM Semiconductor Corporation ***

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UX52I0501Z

VER. 01 22-Jan-15

VERSION HISTORY

TYPE UX 5.0x3.2 SEAM SEALED CRYSTAL CLOCK OSCILLATOR

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ELECTRICAL SPECIFICATIONS

SRe Part Number : **UX52I0501Z**

Item	Symbol	Specifications	Units	Notes
Nominal Frequency	F ₀	180.550000	MHz	
Frequency Stability	F _T	± 50	ppm	**See note
Operating Temperature Range	T _R	-40 to +85	°C	
Supply Voltage	V _{CC}	+3.3 ± 10.0%	V	
Logic Type	LT	LVPECL		
Supply Current, Output Enabled	I _{CC/OE}	80	mA	Max.
Supply Current, Output Disabled	I _{CC/OD}	10	mA	Max.
Duty Cycle (Symmetry)	DC/SY	45 / 55	%	Measured 50% of Waveform
Rise / Fall Time	T _R /T _F	0.85	ns	Max. measured 20/80% of Waveform
Output Voltage "0" Level	V _{OL}	V _{CC} - 1.620V	V	Max.
Output Voltage "1" Level	V _{OH}	V _{CC} - 1.025V	V	Min.
Output Load		50Ω to V _{CC} - 2V		
Jitter, Phase	RMS	0.2	ps	Typ. 12KHz ~ 20MHz Frequency Band
Jitter, Accumulated	RMS(1-σ)	8	ps	Typ. 20,000 Consecutive Periods
Jitter, Peak to Peak	Pk-Pk	50	ps	Max. 100,000 Random Periods
Start Up Time		10	ms	Max.
Storage Temperature Range		-55 to +125	°C	

※ This product doesn't include harmful substance that stipulated by SONY SS-00259 Level 1 and S-AT2-001 Level 1 standard. RoHS Compliant (Pb - Free).

**Stability includes all combinations of Operating Temperature, Load changes, rated Input (Supply) Voltage changes, Initial Calibration Tolerance (25°C), Aging (1 year at 25°C Average Effective Ambient Temperature), Shock and Vibration.

Output Enable / Disable Function

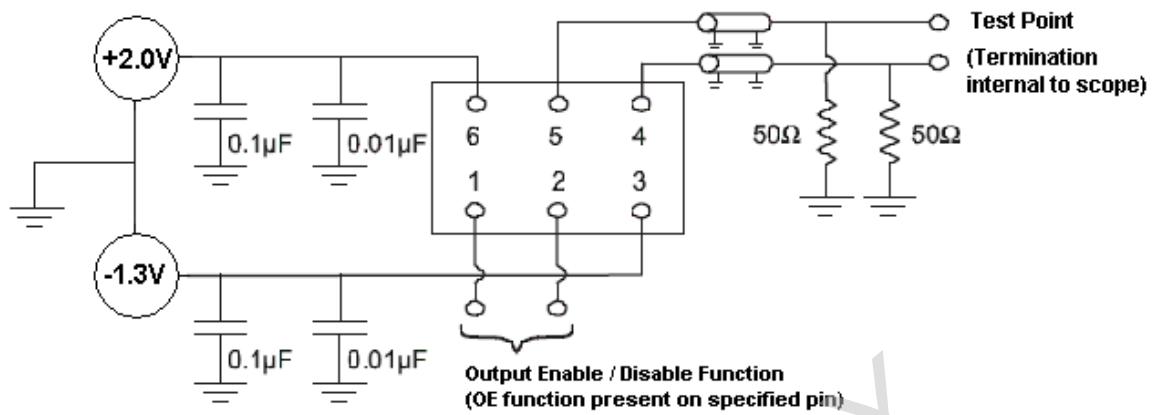
Parameter	Min.	Typ.	Max.	Units	Notes
Input Voltage (Pin1), Output Enable	2			V	Or Open
Input Voltage (Pin1), Output Disable (low power standby)			0.8	V	Output is Hi-Z
Internal Pullup Resistance	50			KΩ	
Output Disable Delay			100	ns	
Output Enable Delay			100	ns	

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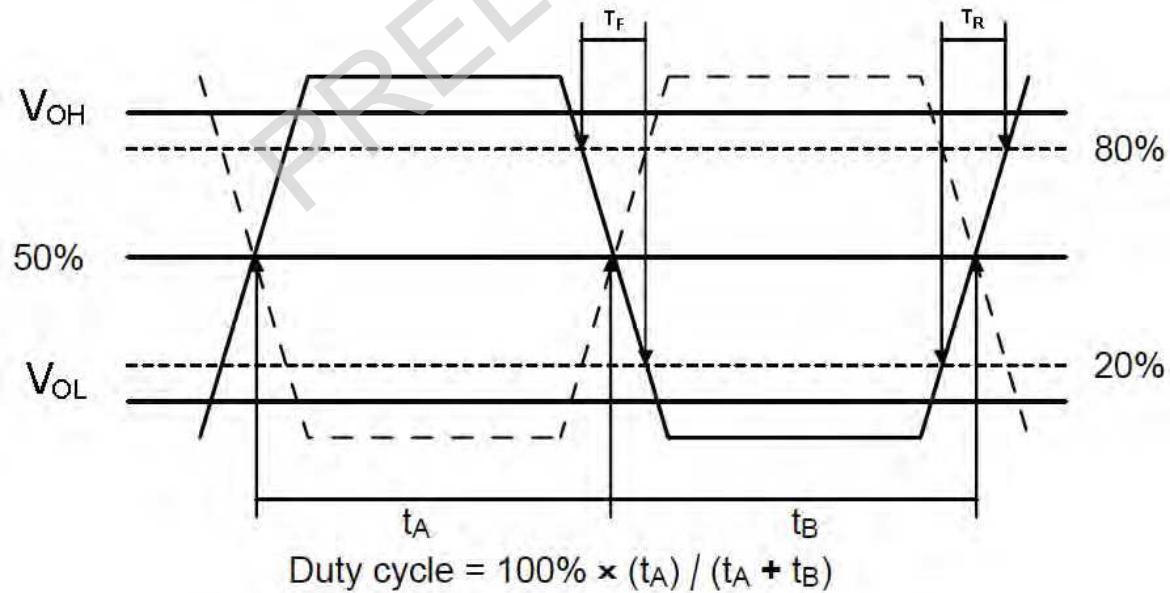
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TEST CIRCUIT



OUTPUT WAVEFORM



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RELIABILITY SPECIFICATIONS

ENVIRONMENTAL:

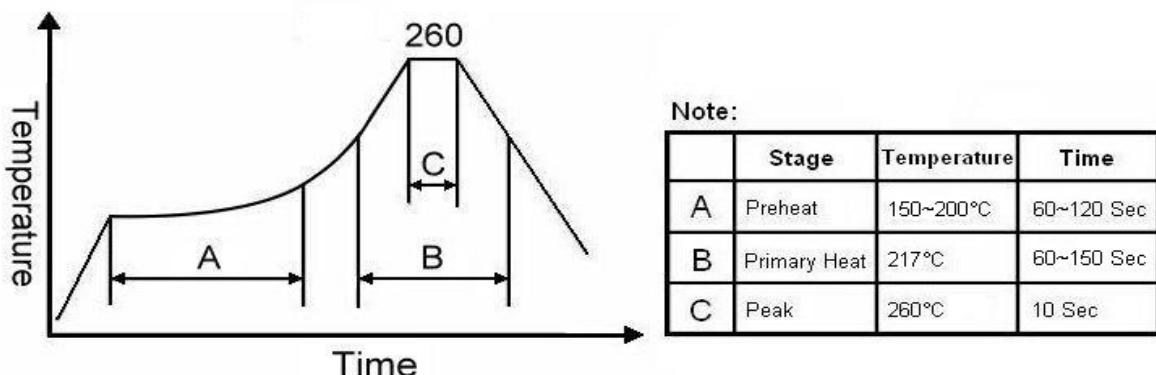
- a) THERMAL SHOCK: MIL-STD-883, Method 1011, Condition A
- b) MOISTURE RESISTANCE: MIL-STD-883, Method 1004
- c) VIBRATION: MIL-STD-883, Method 2007, Condition A
- d) RESISTANCE TO SOLDERING HEAT: J-STD-020D Table 5-2 Pb-free devices
(except 2 cycles max)
- e) HAZARDOUS SUBSTANCE:RoHS Compliant by Exemption

MECHANICAL:

- a) SHOCK: MIL-STD-883, Method 2002, Condition B
- b) SOLDERABILITY: JESD22-B102-D Method 2 (Preconditioning E)
- c) TERMINAL STRENGTH: MIL-STD-883, Method 2004, Test Condition D
- d) GROSS LEAK: MIL-STD-883, Method 1014, Condition C
- e) FINE LEAK: MIL-STD-883, Method 1014, Condition A2, $R1=2\times10^{-8}$ atm cc/s
- f) SOLVENT RESISTANCE: MIL-STD-202, Method 215

SUGGESTED IR REFLOW PROFILE

*As per IPC-JEDEC J-STD-020D



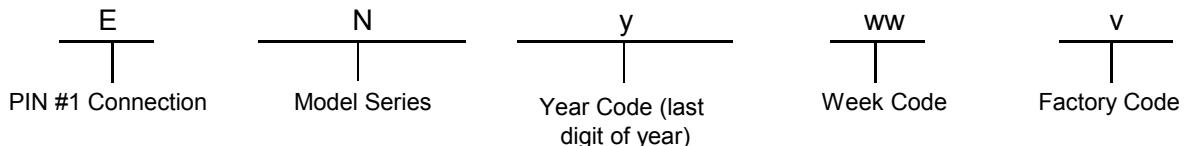
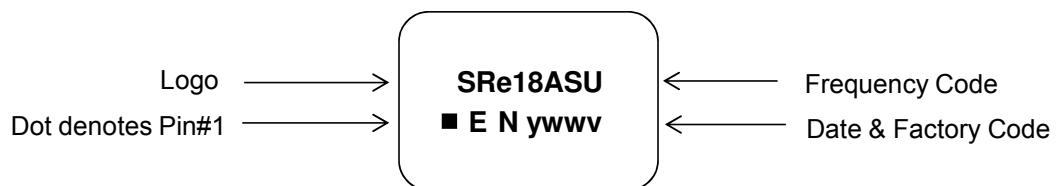
For soldering reflow profile and reliability test ratings go to: <http://www.pericom.com/pdf/sre/reflow.pdf>

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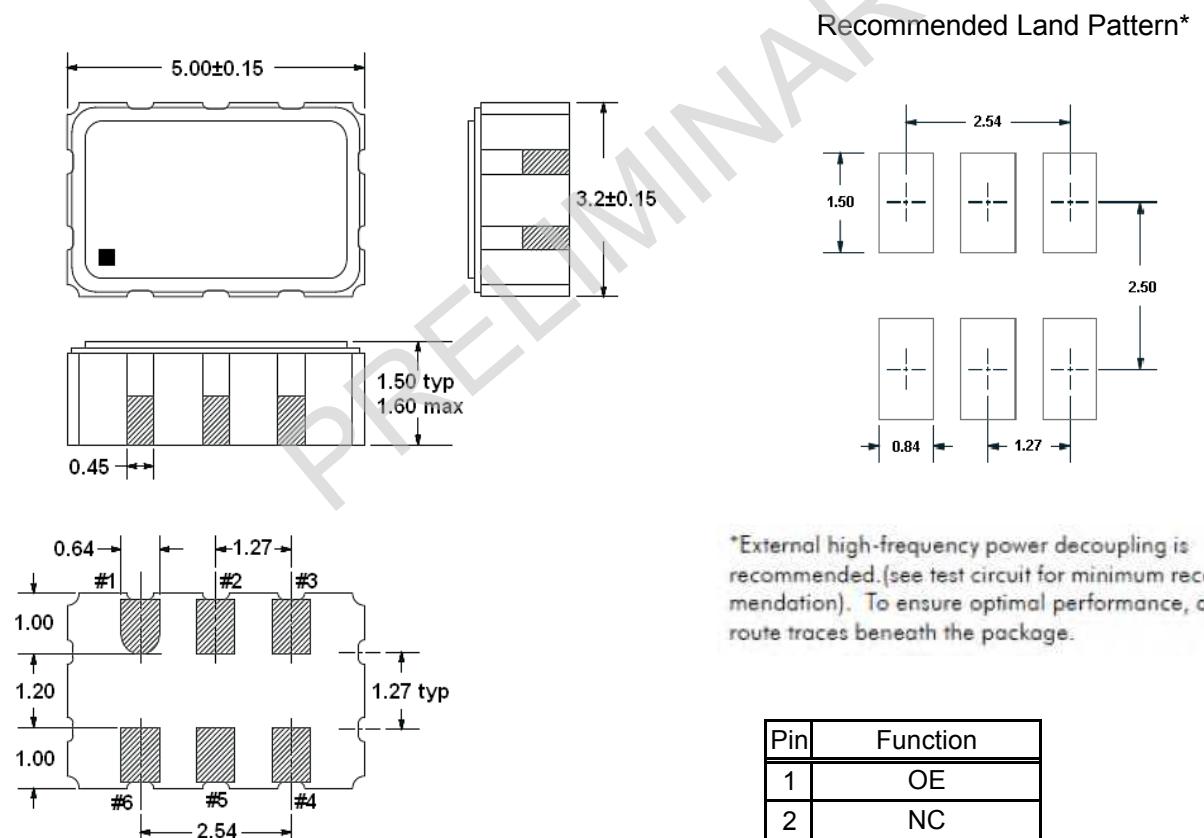
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MARKING



MECHANICAL DRAWINGS (Scale:None. Dimensions are in mm.)



*External high-frequency power decoupling is recommended. (see test circuit for minimum recommendation). To ensure optimal performance, do not route traces beneath the package.

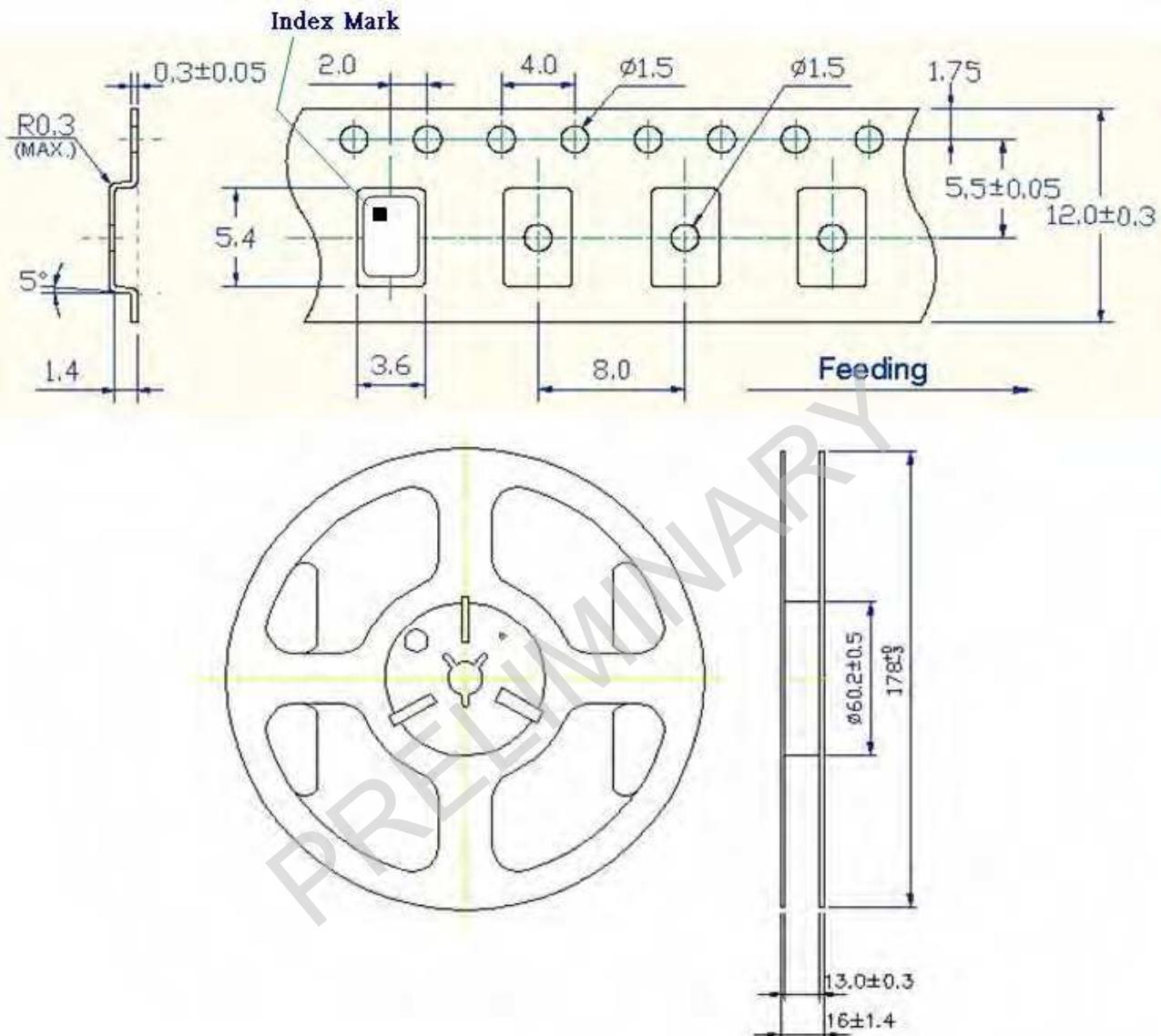
Pin	Function
1	OE
2	NC
3	V _{EE}
4	OUTPUT
5	OUTPUT N
6	V _{CC}

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TAPE&REEL



1. 230mm minimum leafer which consist of carrier and/or tape followed by a minimum of 160mm of empty carrier tape sealed with cover tape.
2. 160mm minimum trailer of empty carrier tape sealed with cover tape.

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PACKING

