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

PSE Technology Corporation

SPECIFICATION FOR APPROVAL

CUSTOMER	
NOMINAL FREQUENCY	32.768000 KHz
PRODUCT TYPE	TYPE KD 5.0x3.2 SEAM SEALED CRYSTAL CLOCK OSCILLATOR
SPEC. NO. (P/N)	KD3270040
CUSTOMER P/N	
ISSUE DATE	May 26, 2011
VERSION	A

APPROVED	PREPARED	QA
		
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

*Pb-free
*RoHS Compliant
*HF-Halogen Free
*REACH Compliant

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

VERSION HISTORY

Version No.	Version Date	Customer Receipt Date	Supplier Receipt Date	Description	Notes
A	May.26,2011			Initial Release	

TYPE KD 5.0x3.2 SEAM SEALED CRYSTAL CLOCK OSCILLATOR

KD3270040

VER. A 26-May-11

ELECTRICAL SPECIFICATIONS

SRe Part Number : KD3270040

Item	Symbol	Specifications	Units	Notes
Nominal Frequency	Fo	32.768000	KHz	
Frequency Stability	FT	± 25	ppm	**See note
Operating Temperature Range	TR	-40 to +85	°C	
Supply Voltage	V_{DD}	+3.3V ± 10%	V	
Logic Type	LT	LVCMOS		
Supply Current, Output Enabled	I_{DD}/OE	0.5	mA	Max.
Supply Current, Output Disabled	I_{DD}/OD	10	µA	Max.
Duty Cycle (Symmetry)	DC/SY	45 / 55	%	Measured 50% of Waveform
Rise / Fall Time	T_R/T_F	15	ns	Measured at 10 / 90% of Waveform
Output Voltage "0" Level	V_{OL}	10% V_{DD}	V	Max.
Output Voltage "1" Level	V_{OH}	90% V_{DD}	V	Min.
Output Load	CL	15	pF	Max.
Start Up Time		10	ms	Max.
Storage Temperature Range		-55°C to +125°C	°C	

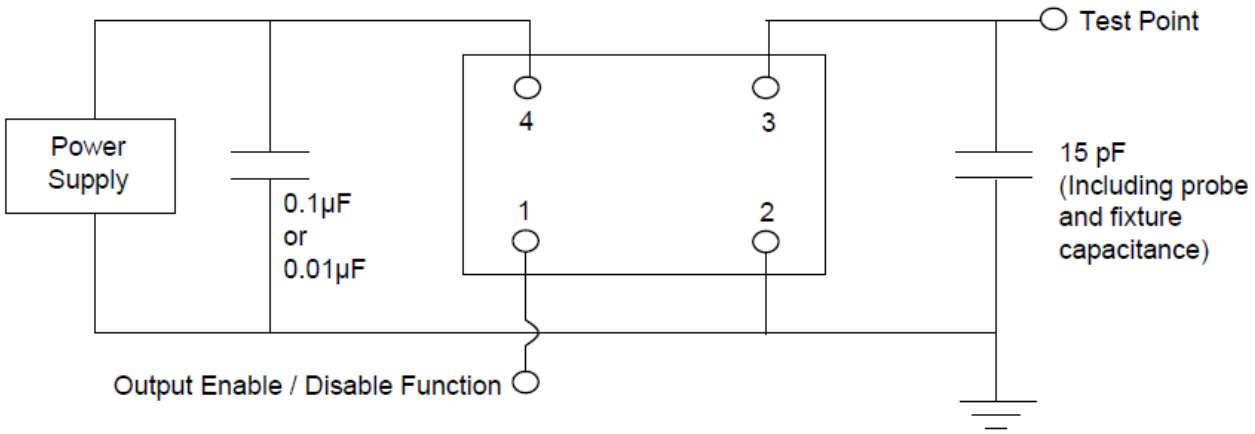
※ This product doesn't include harmful substance that stipulated by SONY SS-00259 Level 1 and S-AT2-001 Level 1 standard. RoHS Compliant (Pb - Free).

****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.**

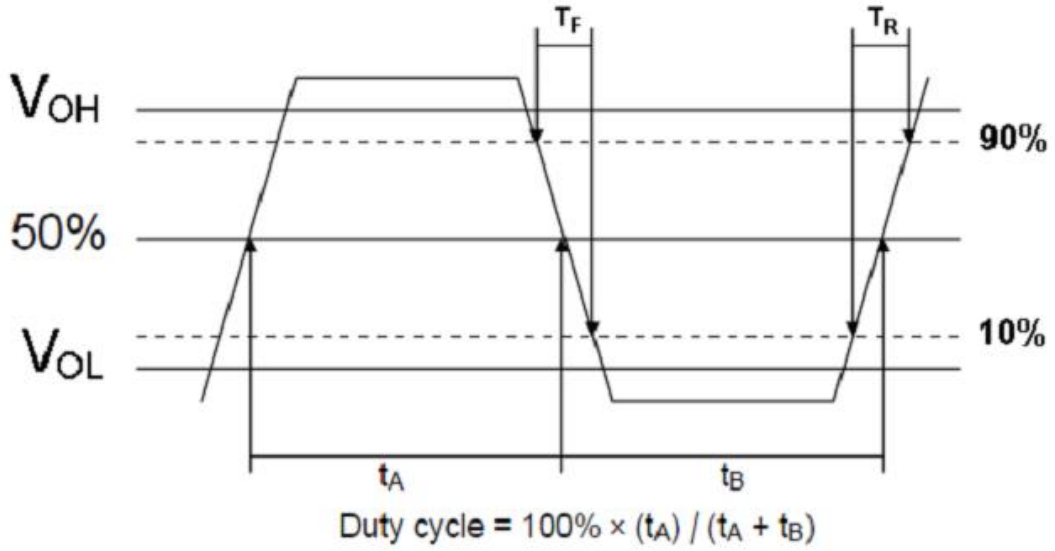
Output Enable / Disable Function

Parameter	Min.	Typ.	Max.	Units	Notes
Input Voltage (Pin1), Output Enable	$0.7V_{DD}$			V	Or Open
Input Voltage (Pin1), Output Disable (low power standby)			$0.3V_{DD}$	V	Output is Hi-Z
Internal Pullup Resistance		470		KΩ	
Output Disable Delay			100	ns	
Output Enable Delay			10	ms	

TEST CIRCUIT



OUTPUT WAVEFORM



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: Pb - free and RoHS Compliant.

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

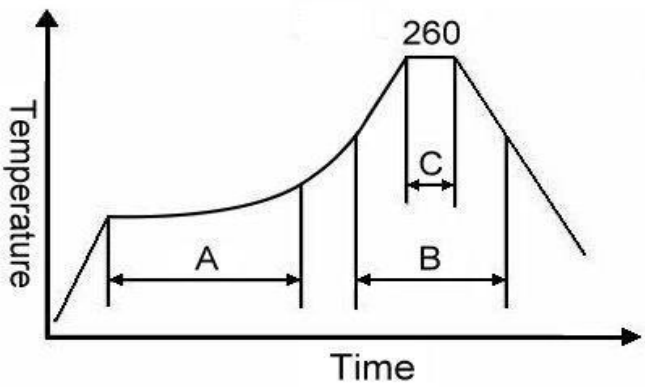
d) GROSS LEAK: MIL-STD-883, Method 1014, Condition C

e) FINE LEAK: MIL-STD-883, Method 1014, Condition A2, R1=2x10^{-8} atm cc/s

f) SOLVENT RESISTANCE: MIL-STD-202, Method 215

SUGGESTED IR REFLOW PROFILE

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

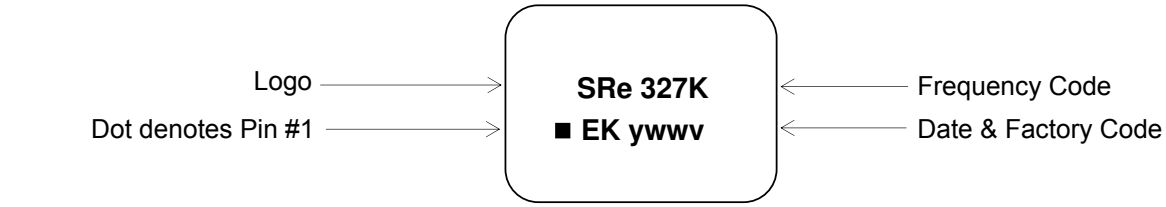


Note:

	Stage	Temperature	Time
A	Preheat	150~200°C	60~120 Sec
B	Primary Heat	217°C	60~150 Sec
C	Peak	260°C	10 Sec

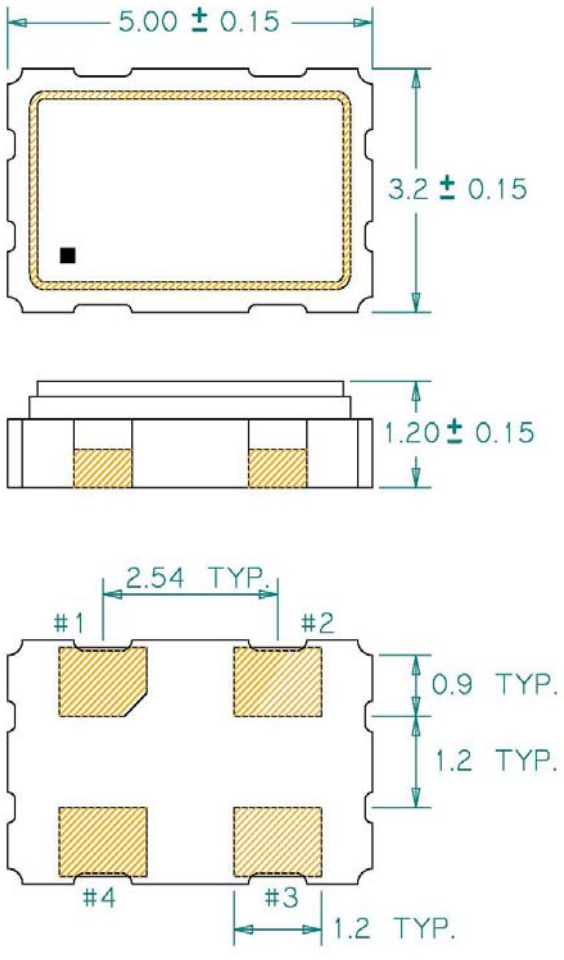
For soldering reflow profile and reliability test ratings go to: http://www.pericom.com/pdf/sre/reflow.pdf

MARKING

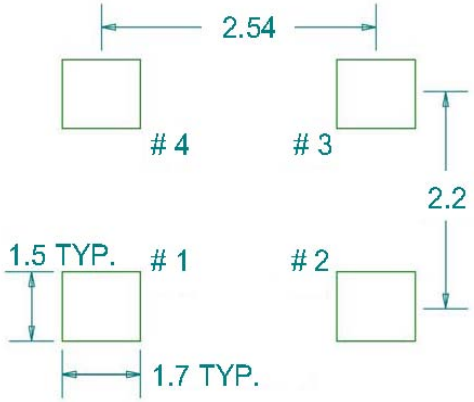


E	K	y	ww	v
PIN #1 Connection	Model Series	Year Code (last digit of year)	Week Code	Factory Code

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



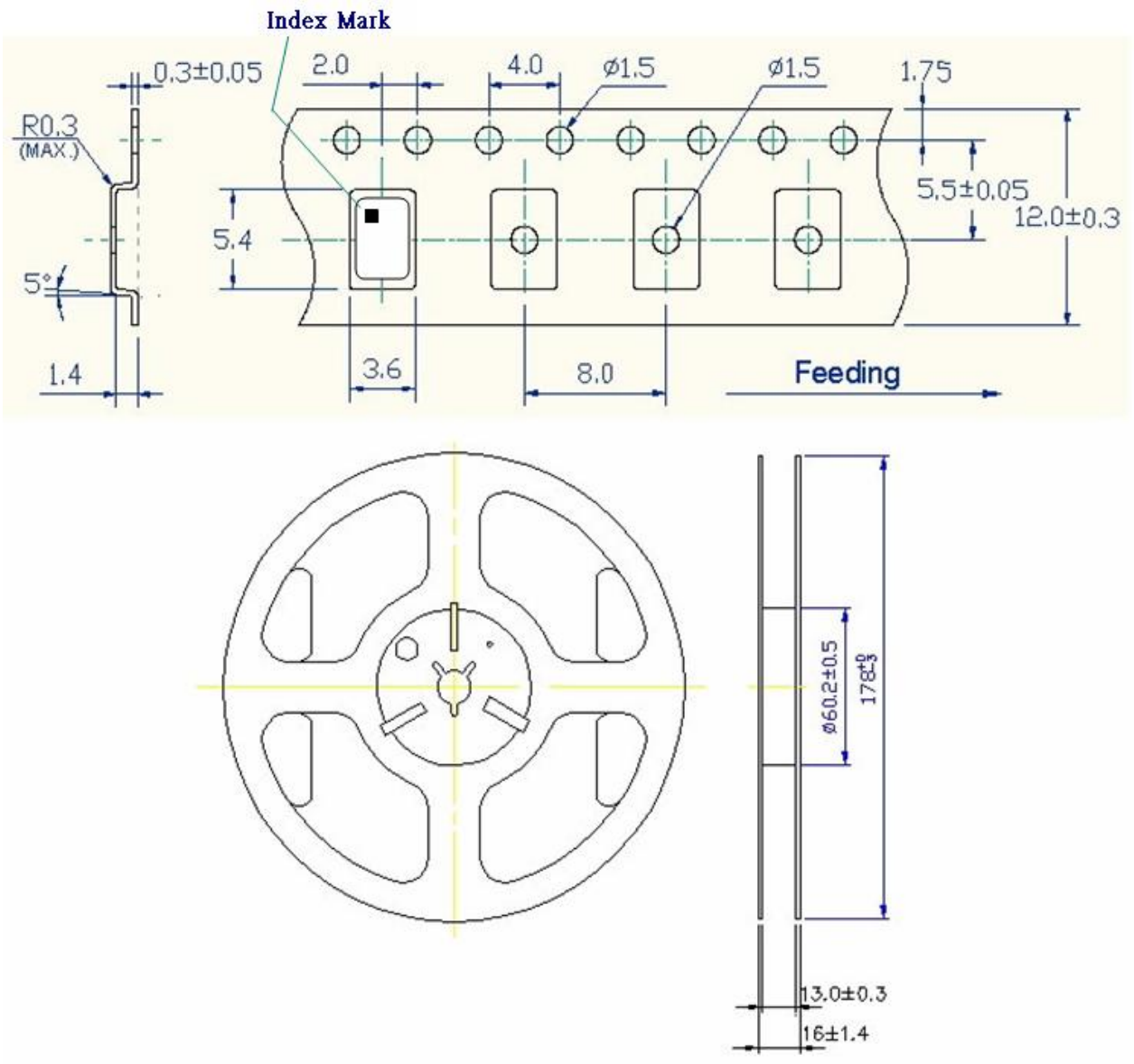
Recommended Land Pattern*



*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	Ground
3	Clock Output
4	V_{DD}

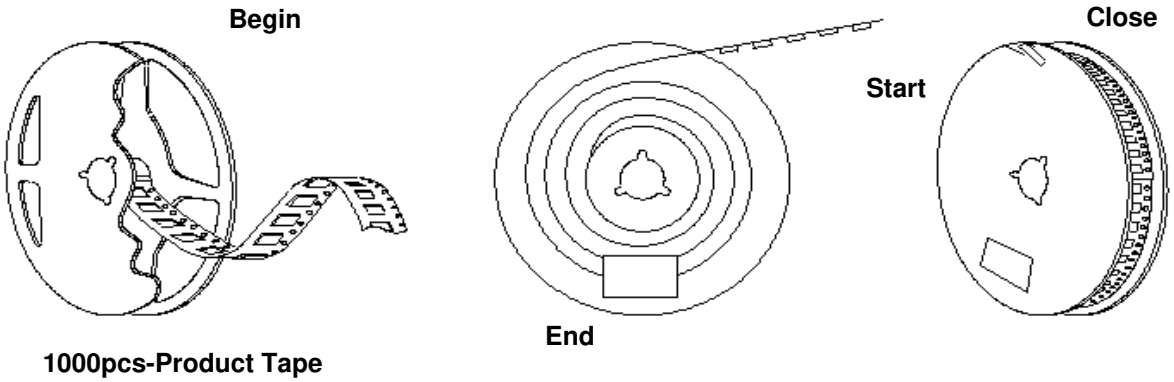
TAPE&REEL

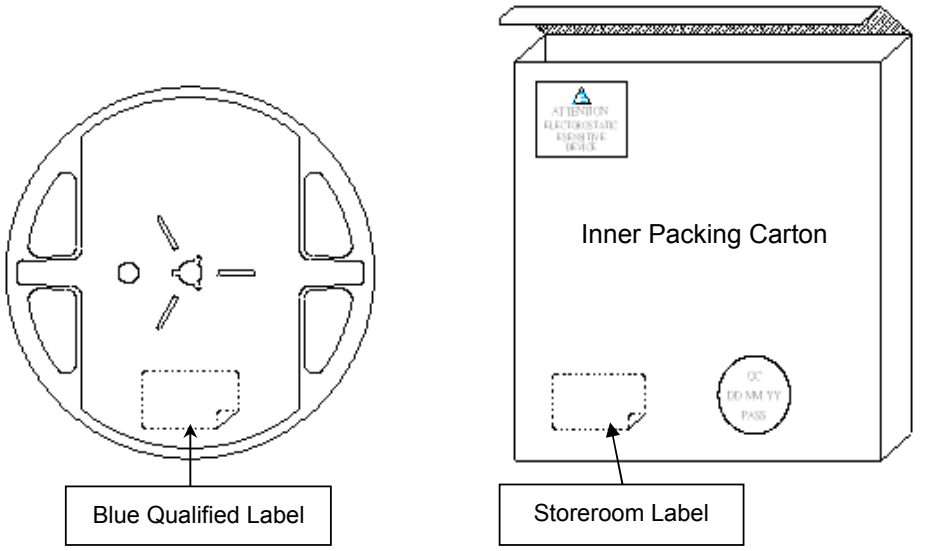


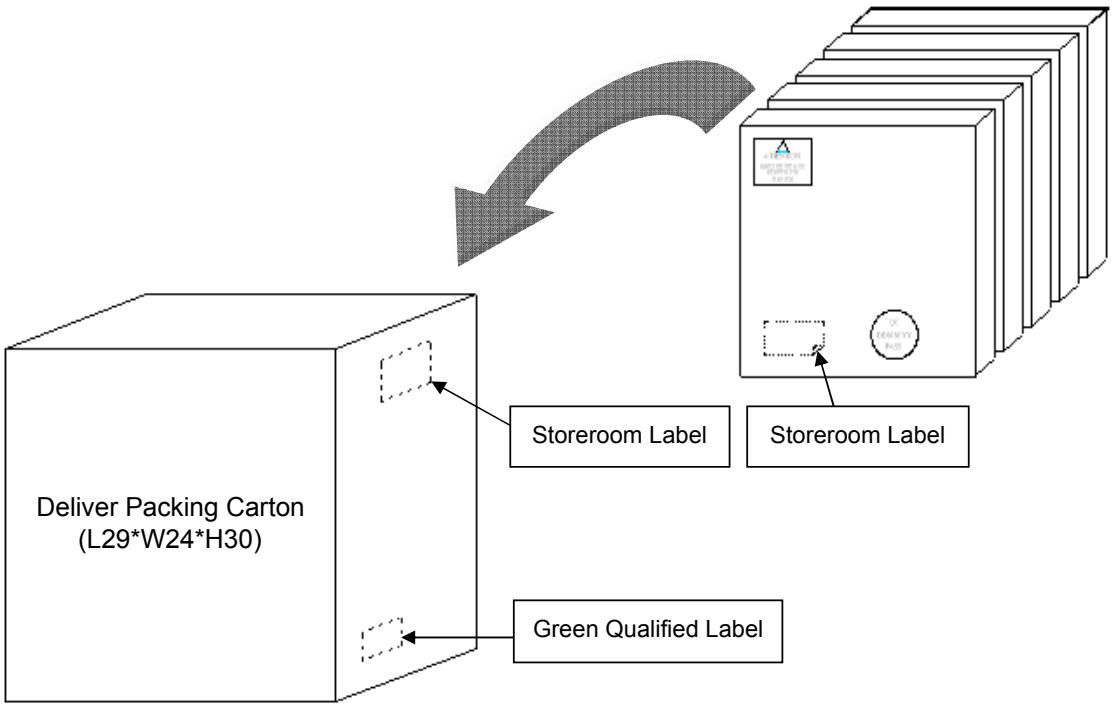
1. 230mm minimum leafer which consist of carrier and/or tape followed by a minimum of 160mm of empty carrier tape sealed with cover tape.

2. 160mm minimum trailer of empty carrier tape sealed with cover tape.

PACKING


Begin
Close
Start
End
1000pcs-Product Tape


Inner Packing Carton
Blue Qualified Label
Storeroom Label


Storeroom Label
Storeroom Label
Deliver Packing Carton
(L29*W24*H30)
Green Qualified Label