

# PSE Technology Corporation

## SPECIFICATION FOR APPROVAL

CUSTOMER	_____
NOMINAL FREQUENCY	<b>37.400000 MHz</b>
PRODUCT TYPE	<b>TYPE FH 2.5x2.0 SEAM SEALED CRYSTAL</b>
PART NUMBER	<b>FH3740013Z</b>
CUSTOMER P/N	_____
ISSUE DATE	<b>August 20, 2014</b>
VERSION	<b>B</b>

APPROVED	PREPARED	QA
<i>Brenda</i>	<i>Nikhi Lu</i>	<i>Becky Lin</i>
APPROVED BY CUSTOMER		
Please return one copy with approval to PSE-TW		

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 TEL:886-3-451-8888  
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<http://www.saronix-ecera.com.tw/>

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

**A Company of PERICOM Semiconductor Corporation**

# TYPE FH 2.5x2.0 SEAM SEALED CRYSTAL

## ***FH3740013Z***

VER.B 20-AUG-14

### VERSION HISTORY

Version No.	Version Date	Customer Receipt Date	Supplier Receipt Date	Description	Notes
A	Aug. 19, 2014			Initial Release	
B	Aug. 20, 2014			Updated to Frequency Stability +/-10ppm, Operating Drive Level 100uW , Maximum Drive Level 150uW, ESR 10ohms typ / 30ohms max , C0 3pF & aging +/-1ppm.	

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### ELECTRICAL SPECIFICATIONS

Item	Symbol	Specifications	Units	Notes
Nominal Frequency	Fn	37.400000	MHz	
Mode of Oscillation	MO	AT Cut-Fundamental		
Calibration Load Capacitance	CL	8	pF	
Calibration Tolerance	FL	± 10	ppm	at 25°C±3°C
Operating Temperature Range	TR	-30 to +85	°C	
Frequency Stability(Frequency Deviation over the Operating Temperature Range)	F/T	± 10	ppm	Reference to the Frequency at 25°C
Operating Drive Level		100	μW	
Maximum Drive Level		150	μW	
Equivalent Series Resistance	ESR	10 / 30	Ω	Typ. / Max.
Shunt Capacitance	C0	3	pF	Max.
Aging at 25°C		± 1	ppm	Max, 1st year
Storage Temperature		-55 to +125	°C	
Insulation Resistance		500	MΩ	Min

\*\* 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).

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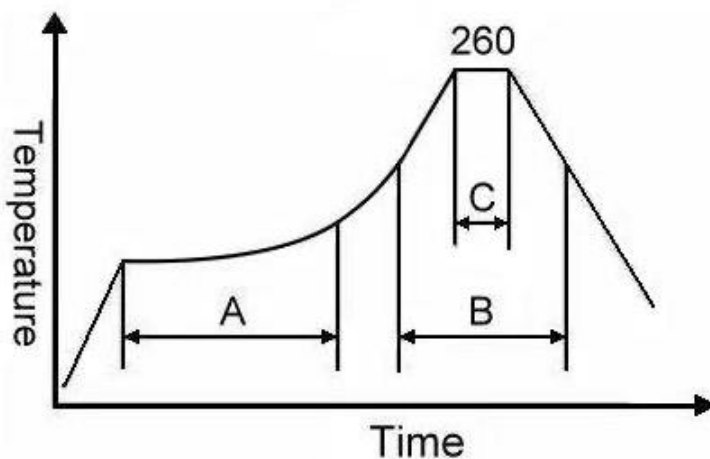
## RELIABILITY SPECIFICATIONS

### MECHANICAL AND ENVIRONMENTAL RATINGS:

- a) FINE LEAK TEST: JESD22-A109 (Condition 1A)
- b) GROSS LEAK TEST: JESD22-A109 (Condition C)
- c) MOISTURE RESISTANCE: JESD22-A113
- d) SHOCK: JESD22-B104 (Condition B)
- e) SOLDERABILITY : (RoHS version): J-STD-002
- f) VIBRATION: JESD22-B103
- g) SOLVENT RESISTANCE: JESD22-B107
- h) RESISTANCE TO SOLDERING HEAT (RoHS version): J-STD-020D Table 5.2 Pb free devices (3 cycles max)

## 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

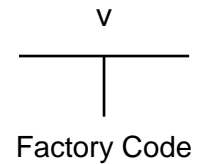
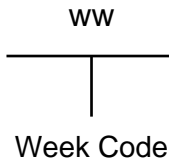
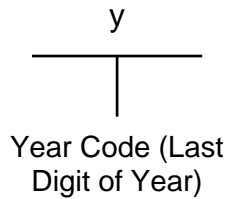
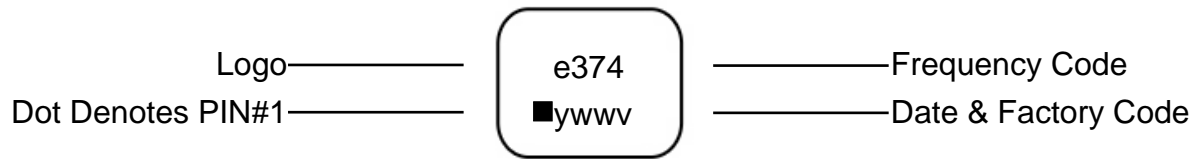
For soldering reflow profile and reliability test ratings go to: <http://www.pericom.com/pdf/sre/reflow.pdf>

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## FH3740013Z

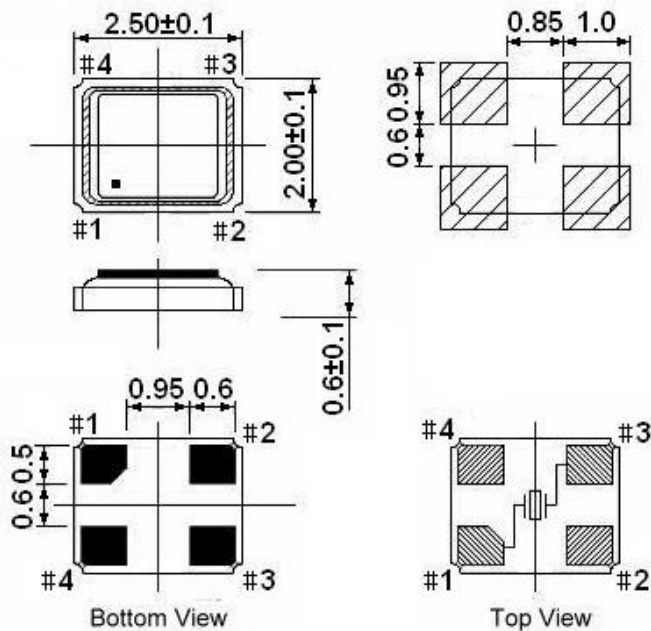
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### MARKING



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

Recommended Land Pattern



\*\* Recommended - Pin 1 & 3 : CRYSTAL  
Pin 2 & 4 : GND

Notes:

1. Package drawings are for reference only, and the appearances of objects may vary. Actual packages are based on the real product.
2. The marking dot denotes Pin#1.
3. The position and shape of the chamfer pin may vary and are based on the real product.



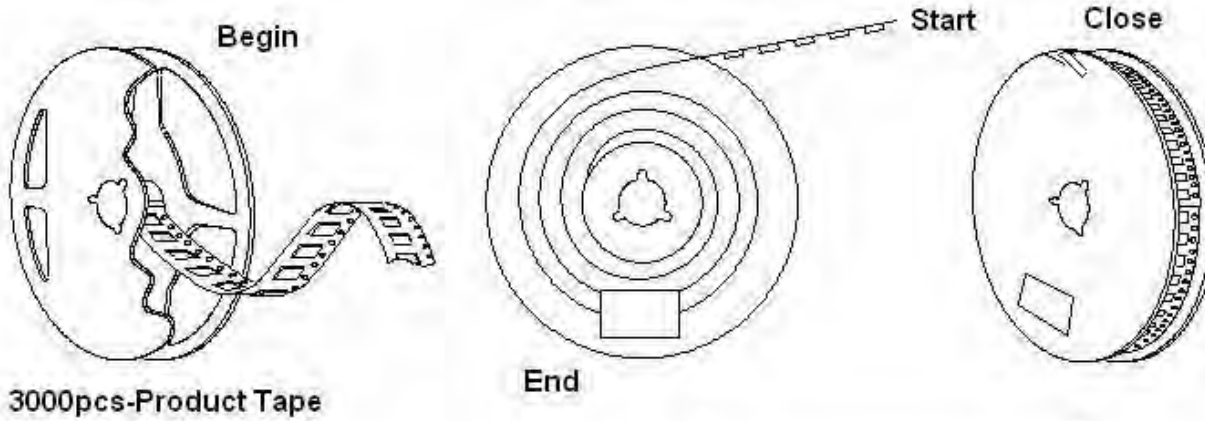


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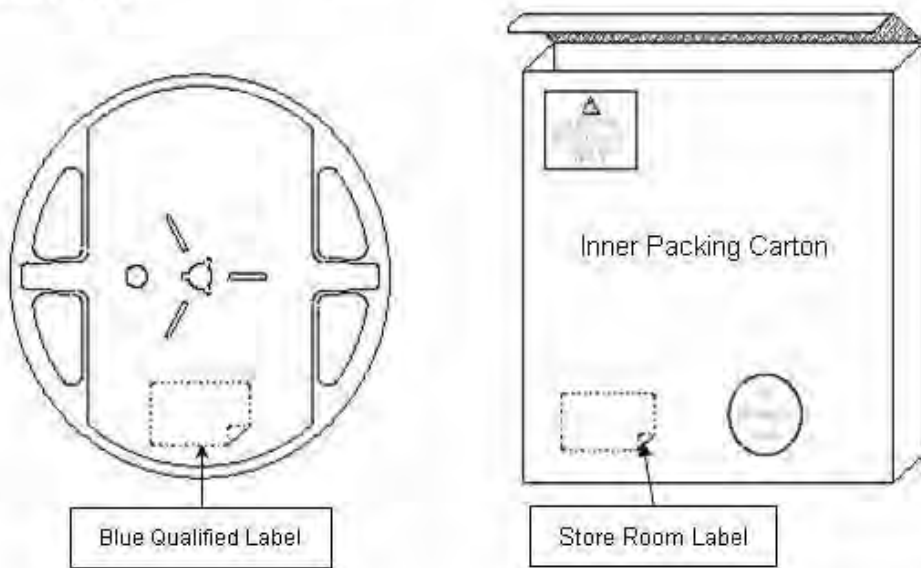
## FH3740013Z

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### PACKING

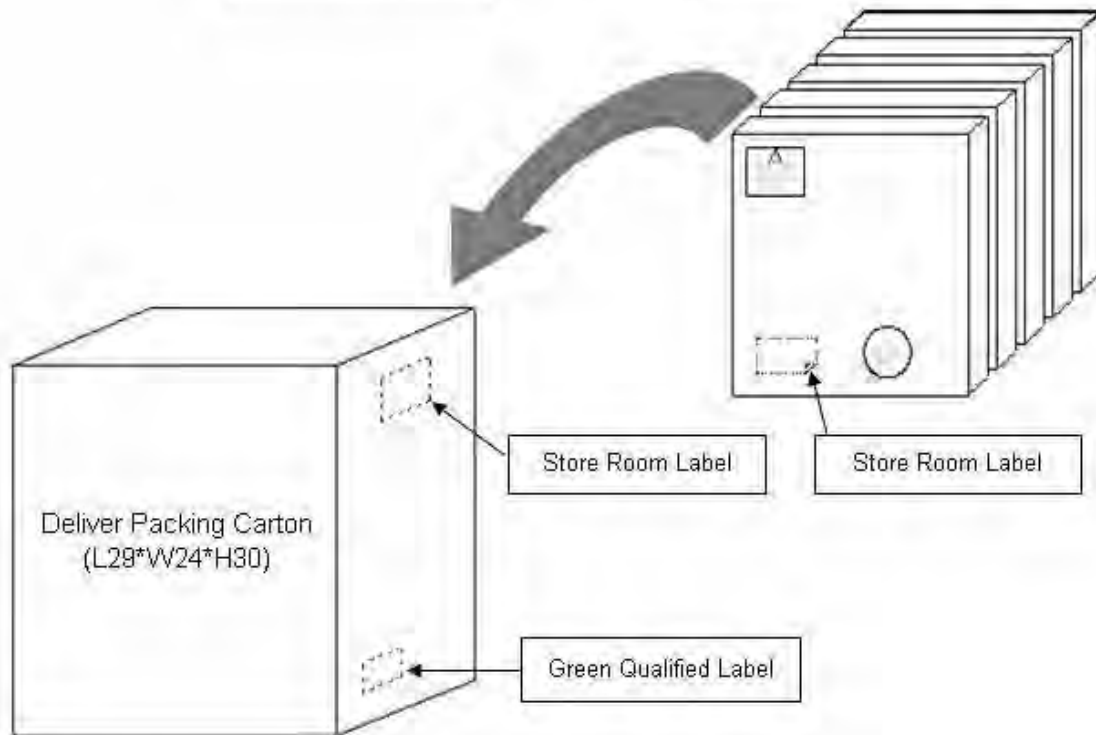


3000pcs-Product Tape



Blue Qualified Label

Store Room Label



Store Room Label

Store Room Label

Green Qualified Label

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