

## **PSE Technology Corporation**

### SPECIFICATION FOR APPROVAL

CUSTOMER	
NOMINAL FREQUENCY	16.000000 MHz
PRODUCT TYPE	TYPE FH 2.5x2.0 SEAM SEALED CRYSTAL
PART NUMBER	FH1600015
CUSTOMER P/N	
ISSUE DATE	March 22, 2011
VERSION	Α

APPROVED	PREPARED	QA		
Brenda	Nikbi Lu	lillin		
APPROVED BY CUSTOMER				

Please return one copy with approval to PSE-TW

### **PSE Technology Corporation**

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

A Company of PERICOM Semiconductor Corporation

VER.A 21-MAR-11

#### **VERSION HISTORY**

Version No.	Version Date	Customer Receipt Date	Supplier Receipt Date	Description	Notes
A	Mar. 21, 2011			Initial Release	

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### **ELECTRICAL SPECIFICATIONS**

Item	Symbol	Specifications	Units	Notes
Nominal Frequency	Fn	16.000000	MHz	
Mode of Oscillation	МО	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		10	μW	
Maximum Drive Level		100	μW	
Equivalent Series Resistance	ESR	60	Ω	Max.
Shunt Capacitance	C0	5	pF	Max.
Aging at 25°C		± 3	ppm	Max, 1st year
Storage Temperature		-55 to +125	°C	
Insulation Resistance		500	ΜΩ	Min

<sup>\*\*</sup> 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

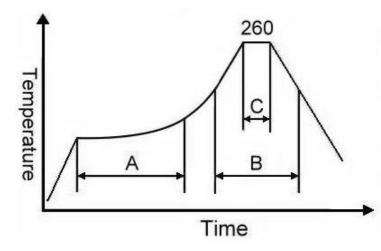
f)VIBRATION: JESD22-B103

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



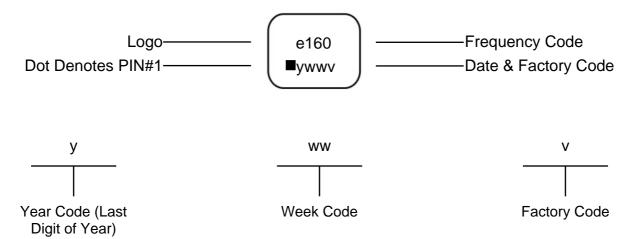
#### Note:

	Stage	Temperature	Time
Α	Preheat	150~200°C	60~120 Sec
В	Primary Heat	217°C	60~150 Sec
С	Peak	260°C	10 Sec

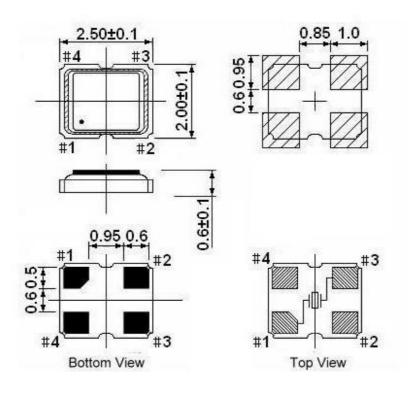
For soldering reflow profile and reliability test ratings go to: http://www.pericom.com/pdf/sre/reflow.pdf

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#### **MARKING**



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

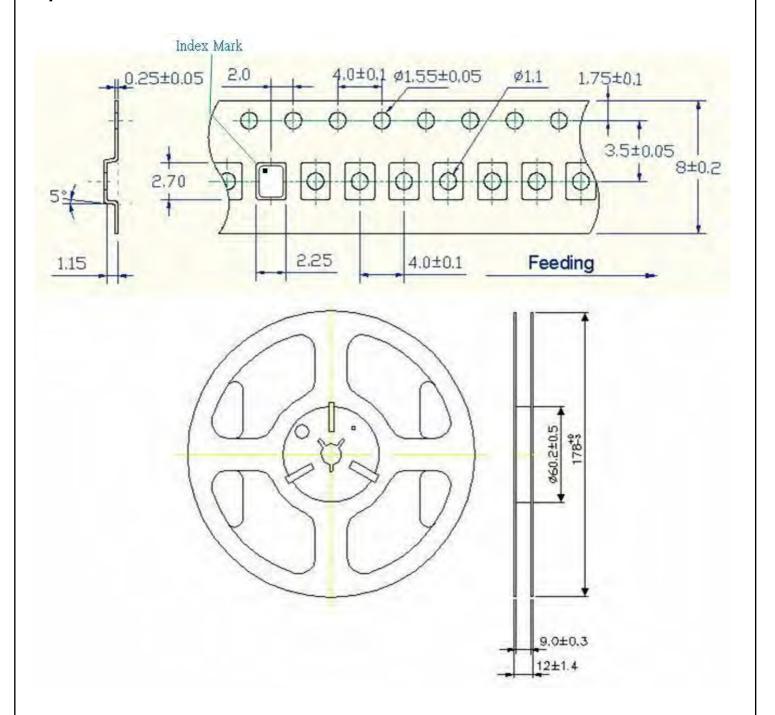


\*\* Recommended - Pin 1 & 3 : CRYSTAL Pin 2 & 4 : GND

#### Note:

- 1. The marking dot denotes Pin#1.
- 2. Pin positions of the drawing is only for reference, and the Pin with chamfer is based on the real product.

### 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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