

PSE Technology Corporation

SPECIFICATION FOR APPROVAL

CUSTOMER

NOMINAL FREQUENCY

16.000000 MHz

PRODUCT TYPE

TYPE FW 2.0x1.6 SEAM SEALED CRYSTAL

PART NUMBER

FW1600008

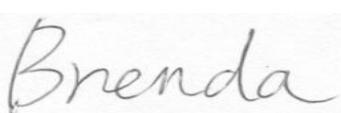
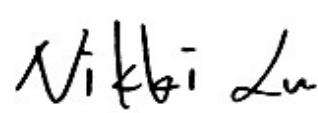
CUSTOMER P/N

ISSUE DATE

March 11, 2014

VERSION

B

APPROVED	PREPARED	QA
		
APPROVED BY CUSTOMER		
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

TYPE FW 2.0x1.6 SEAM SEALED CRYSTAL

FW1600008

VER.B 11-MAR-14

VERSION HISTORY

Version No.	Version Date	Customer Receipt Date	Supplier Receipt Date	Description	Notes
A	Feb. 19, 2014			Initial Release	
B	Mar. 11, 2014			Changed Frequency Stability from $\pm 15\text{ppm}$ to $\pm 20\text{ppm}$	

TYPE FW 2.0x1.6 SEAM SEALED CRYSTAL

FW1600008

VER.B 11-MAR-14

ELECTRICAL SPECIFICATIONS

Item	Symbol	Specifications	Units	Notes
Nominal Frequency	Fn	16.000000	MHz	
Mode of Oscillation	MO	AT Cut-Fundamental		
Calibration Load Capacitance	CL	12	pF	
Calibration Tolerance	FL	± 10	ppm	at 25°C±3°C
Operating Temperature Range	TR	-40 to +85	°C	
Frequency Stability(Frequency Deviation over the Operating Temperature Range)	F/T	± 20	ppm	Reference to the Frequency at 25°C
Operating Drive Level		10	µW	
Maximum Drive Level		100	µW	
Equivalent Series Resistance	ESR	150	Ω	Max.
Shunt Capacitance	C0	3	pF	Max.
Aging at 25°C		± 3	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).

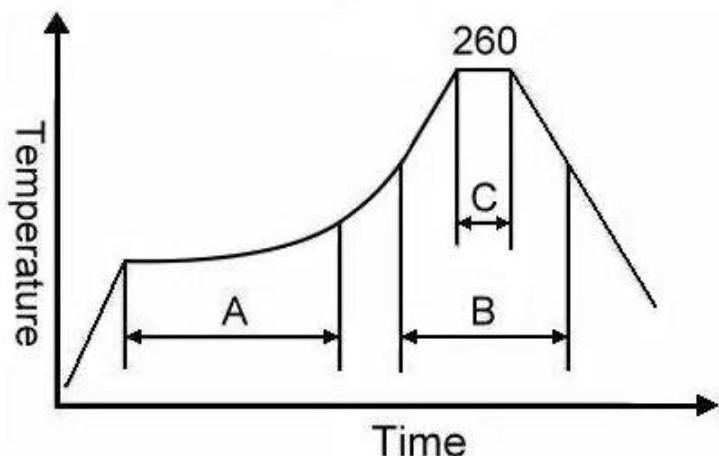
RELIABILITY SPECIFICATIONS

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

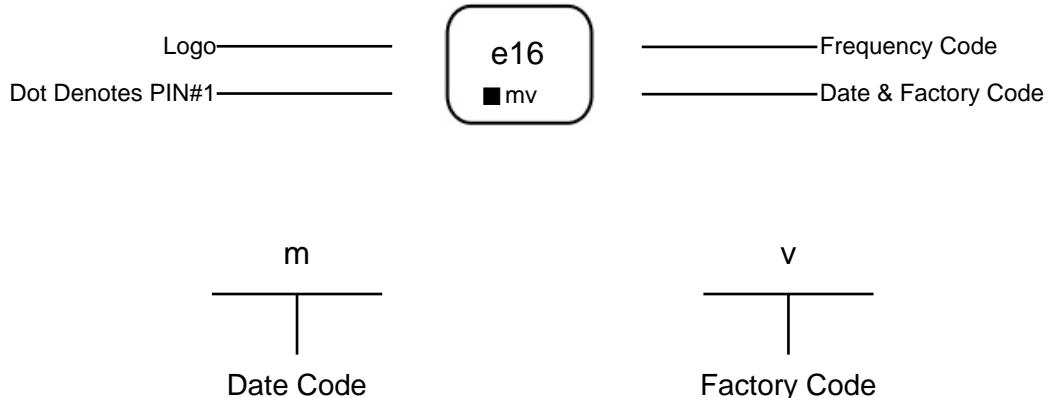
For soldering reflow profile and reliability test ratings go to: <http://www.pericom.com/pdf/sre/reflow.pdf>

TYPE FW 2.0x1.6 SEAM SEALED CRYSTAL

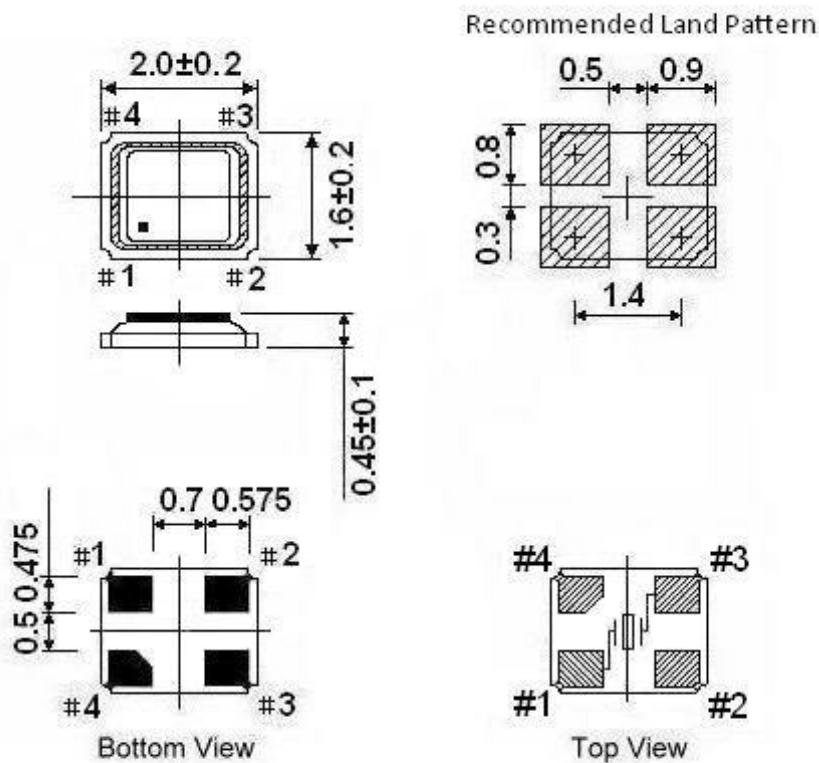
FW1600008

VER.B 11-MAR-14

MARKING



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



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

Notes:

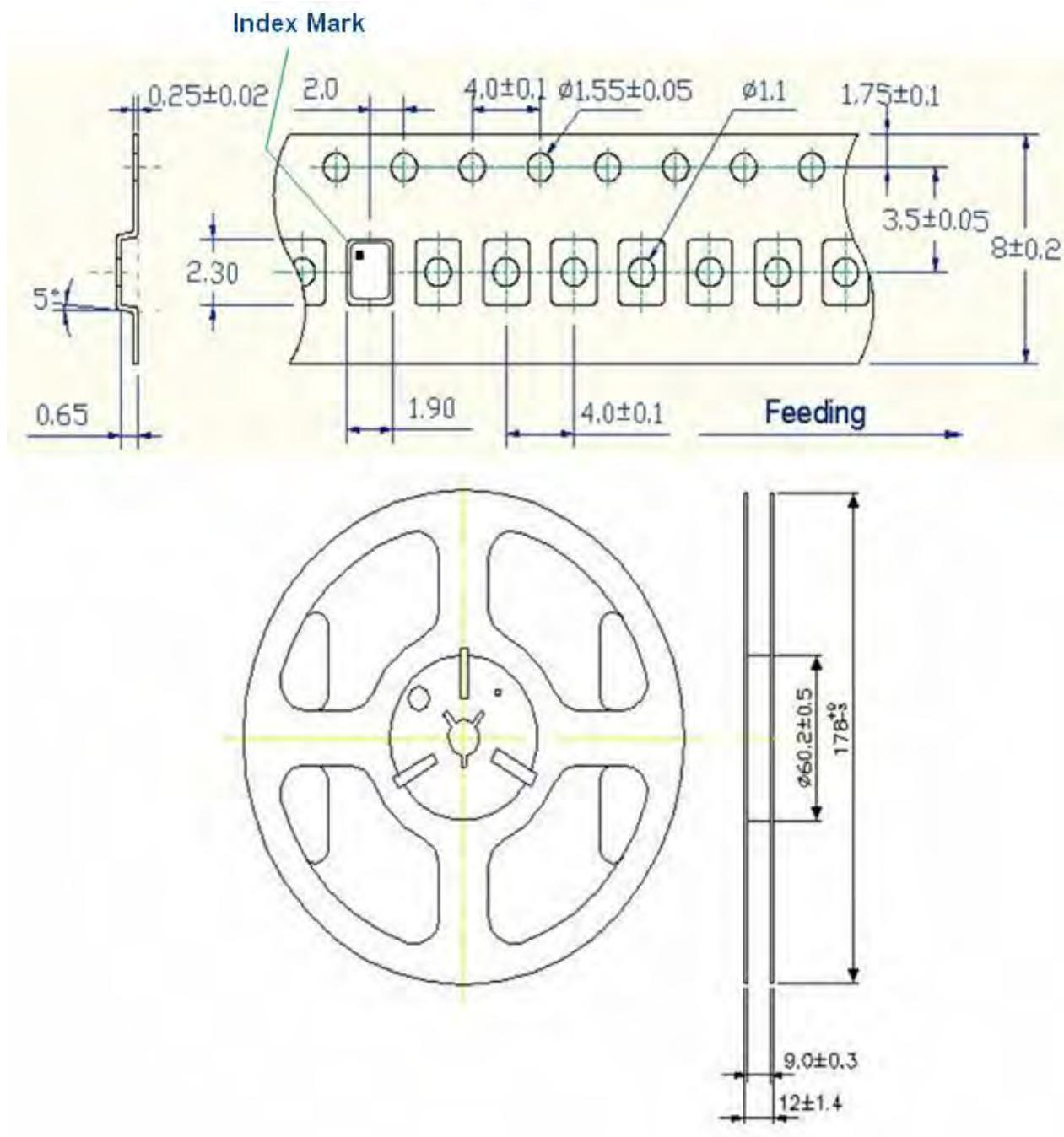
1. Package drawings are for reference only, and the appearances of objects may vary.
Actual packages are based on the real product.
2. The marking dot denotes Pin#1.
3. The position and shape of the chamfer pin may vary and are based on the real product.

TYPE FW 2.0x1.6 SEAM SEALED CRYSTAL

FW1600008

VER.B 11-MAR-14

Tape & Reel



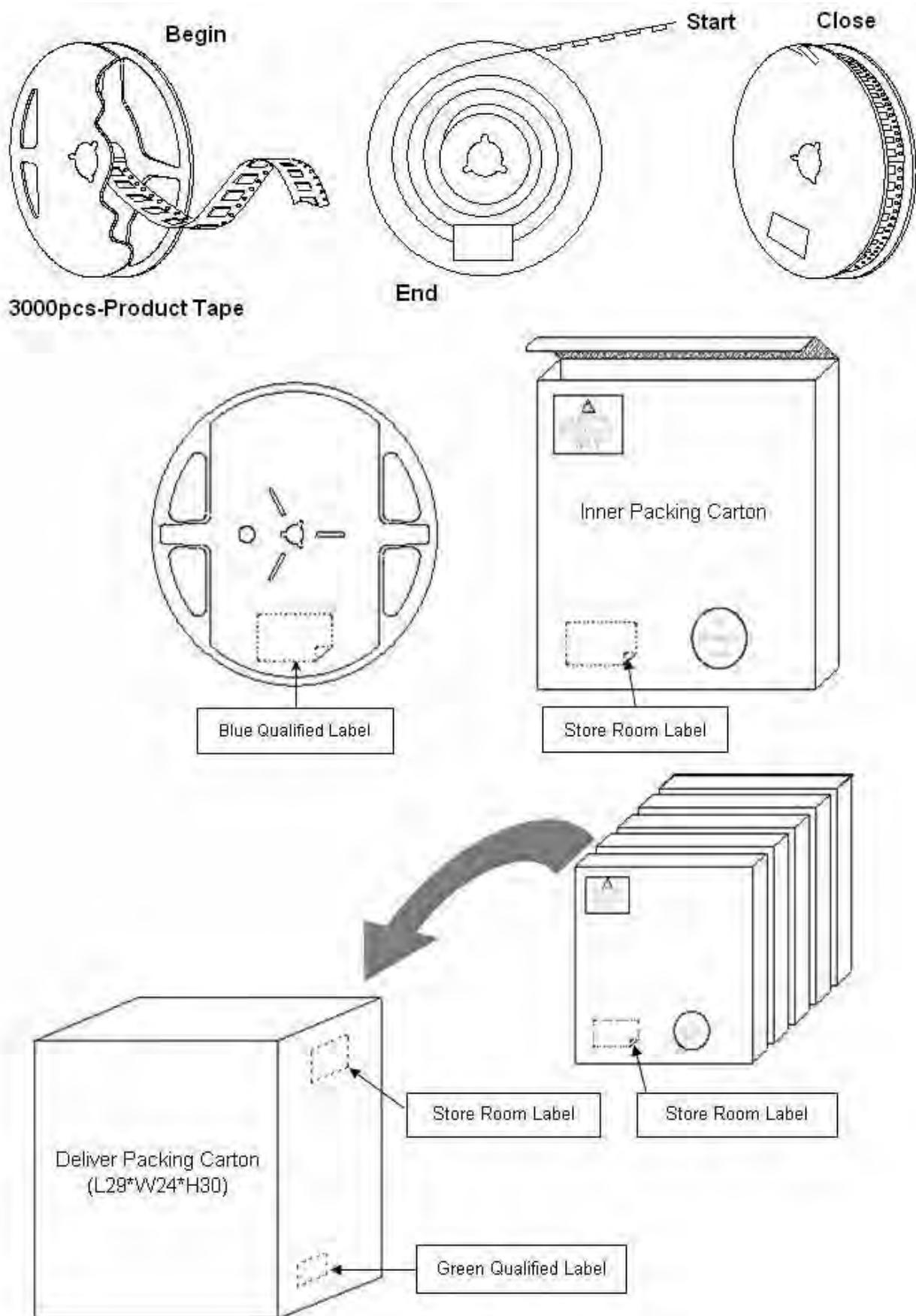
1. 230mm minimum leafer which consist of carrier and/or tape followed by a minimum of 160mm of empty carrier tape sealed with cover tape.
2. 160mm minimum trailer of empty carrier tape sealed with cover tape.

TYPE FW 2.0x1.6 SEAM SEALED CRYSTAL

FW1600008

VER.B 11-MAR-14

PACKING



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Pericom:](#)

[FW1600008](#)