PSE Technology Corporation

SPECIFICATION FOR APPROVAL

CUSTOMER	
NOMINAL FREQUENCY	52.000000 MHz
PRODUCT TYPE	**TYPE FW 2.0x1.6 SEAM SEALED CRYSTAL**
SPEC. NO. (P/N)	FW520WFMT1
CUSTOMER P/N	
ISSUE DATE	June 21, 2016
VERSION	A

APPROVED	PREPARED	QA
Brenda	Nikki Lu	Jenny 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

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

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

Pericom Internal Reference NO. FW5200002Z

VERSION HISTORY

Verision No.	Version Date	Customer Receipt Date	Supplier Receipt Date	Description	Notes
A	Jun.21,2016			Initial Release	

TYPE FW 2.0x1.6 SEAM SEALED CRYSTAL

FW520WFMT1

VER. A 21-Jun-16

ELECTRICAL SPECIFICATIONS

Item	Symbol	Specifications	Units	Notes
Nominal Frequency	Fn	52.000000	MHz	
Mode of Oscillation	MO	AT Cut-Fundamental		
Calibration Load Capacitance	CL	12	pF	
Calibration Tolerance	FL	±7	ppm	at 25°C±3°C
Operating Temperature Range	TR	-40 to +100	°C	
Frequency Stability (Frequency Deviation over the Operating Temperature Range)	F/T	±17	ppm	Reference to the Frequency at 25°C
Operating Drive Level		100	µW	
Maximum Drive Level		200	µW	Max.
Equivalent Series Resistance	ESR	30	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)
($3x10^{-9}$ Pa m^3/s)

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

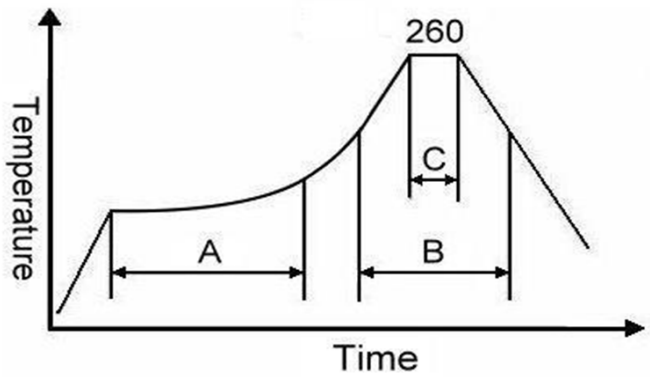
f) VIBRATION: JESD22-B103

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

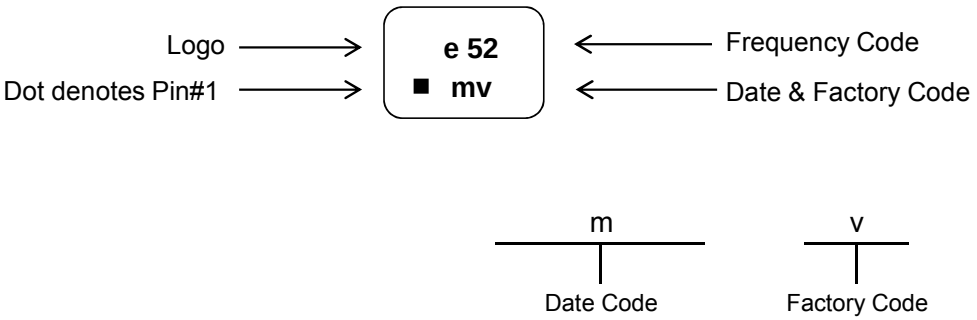


Note:

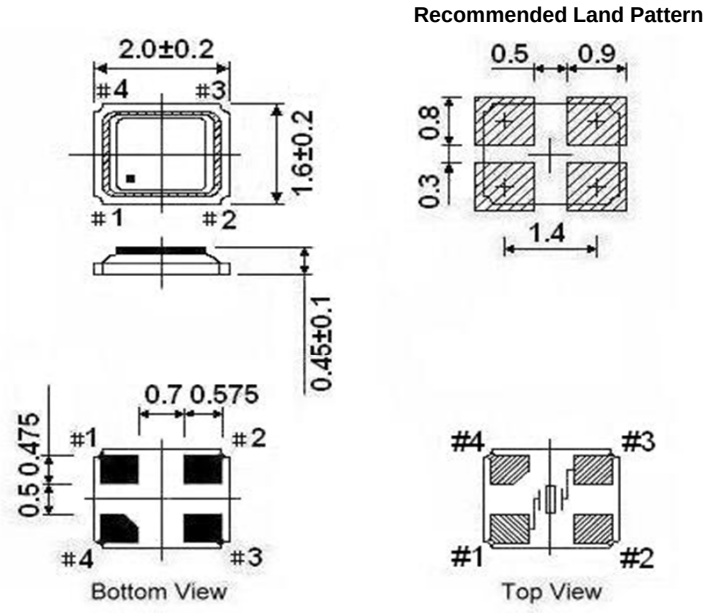
	Stage	Temperature	Time
A	Preheat	150~200°C	60~120 Sec
B	Primary Heat	217°C	60~150 Sec
C	Peak	260°C	10 Sec

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

MARKING



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

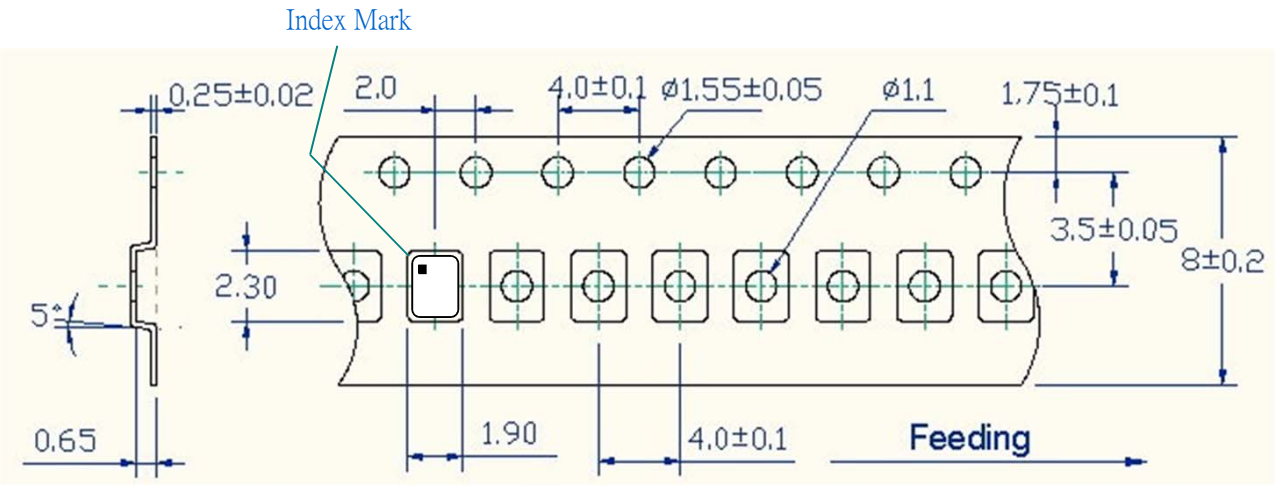


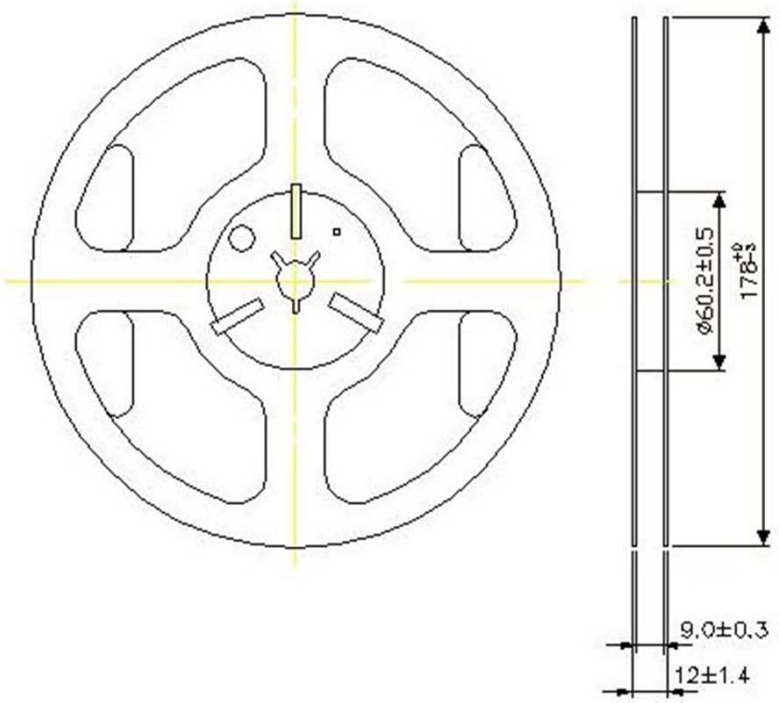
** Recommended - Pin 1 & 3: CRYSTAL
Pin 2 & 4: GND

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.

Tape & Reel

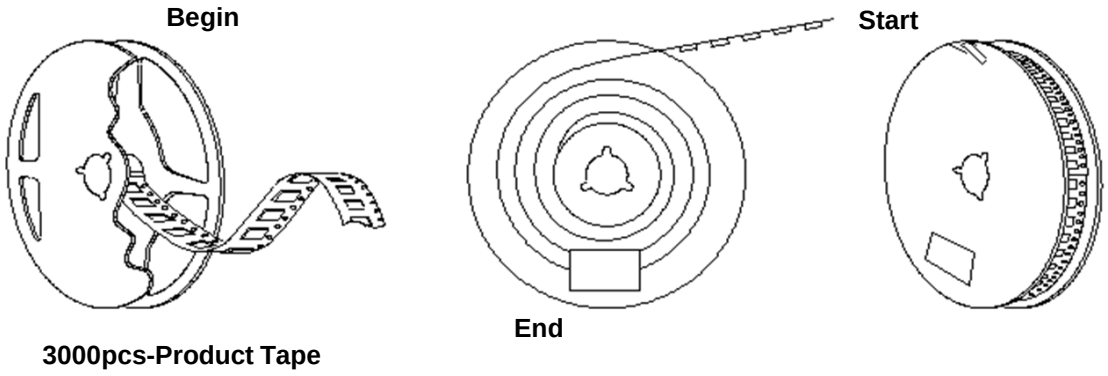


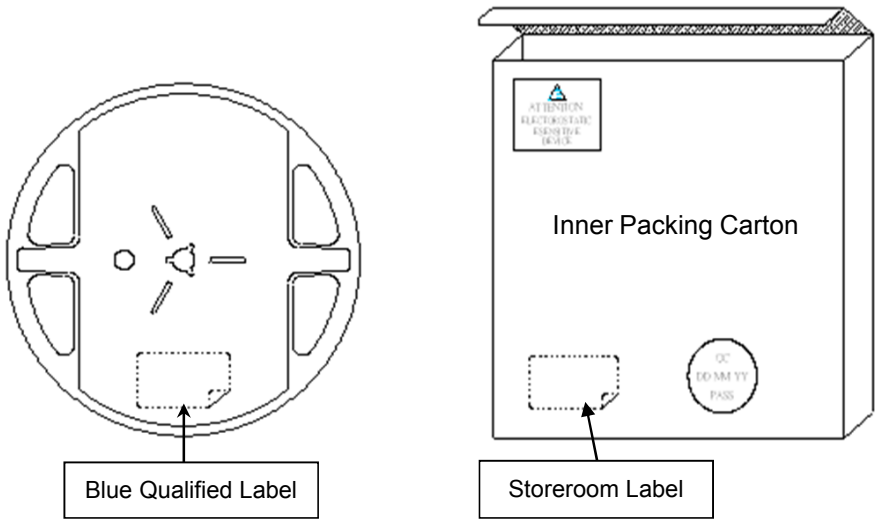


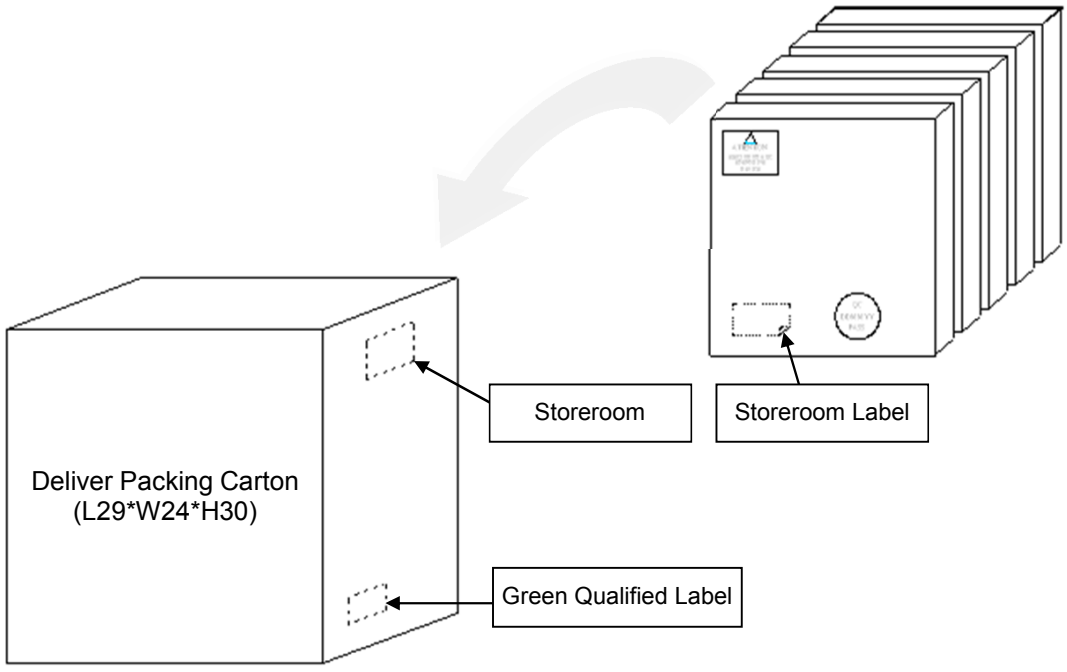
1. 230mm minimum leafer which consist of carrier and/or tape followed by a minimum of 160mm of empty carrier tape sealed with cover tape.

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

PACKING


Begin
Start
End
3000pcs-Product Tape


Inner Packing Carton
Blue Qualified Label
Storeroom Label


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