

PSE Technology Corporation

SPECIFICATION FOR APPROVAL

CUSTOMER	
NOMINAL FREQUENCY	52.000000 MHz
PRODUCT TYPE	TYPE FL 3.2x2.5 SEAM SEALED CRYSTAL
SPEC. NO. (P/N)	FL520WFMT1
CUSTOMER P/N	
ISSUE DATE	June 23, 2016
VERSION	A

APPROVED	PREPARED	QA
Brenda	Niklai Lu	Dong Jang
APPROVED BY CUSTOMER:		AVL Status
Please return one copy v	vith approval to PSE-TW	

PSE Technology Corporation

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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 ***

Pericom Internal Reference NO. FL5200002Z

FL520WFMT1

VER. A 23-Jun-16

VERSION HISTORY

Version No.	Version Date	Customer Receipt Date	Supplier Receipt Date	Description	Notes
А	Jun.23,2016			Initial Release	

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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	
Equivalent Series Resistance	ESR	30	Ω	Max
Shunt Capacitance	C0	5	pF	Max
Trim Sensitivity	TS	10	ppm/pF	Min.
Aging at 25°C		±3	ppm	Max, 1st year
Storage Temperature		-55 to +125	°C	
Insulation Resistance		500	МΩ	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

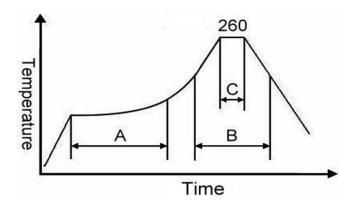
f) VIBRATION: JESD22-B103

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



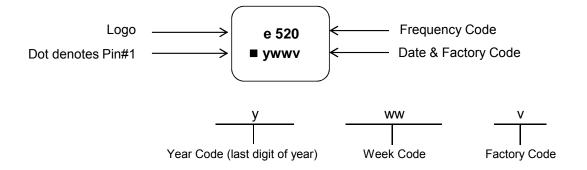
Note	•		
	Stage	Temperature	Time
Α	Preheat	150~200°C	60~120 Sec
В	Primary Heat	217°C	60~150 Sec
С	Peak	260°C	10 Sec

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

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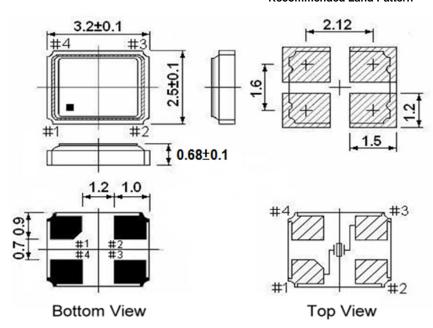
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MARKING



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

Recommended Land Pattern



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

Notes:

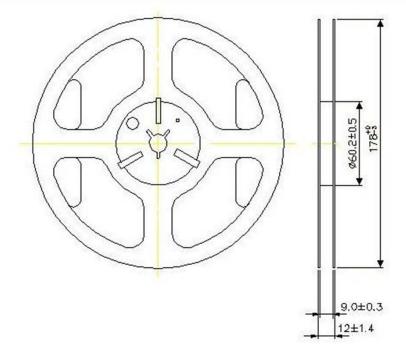
- Package drawings are for reference only, and the appearances of objects may vary.
 Actual packages are based on the real product.
- 2. The marking dot denotes Pin#1.
- 3. The position and shape of the chamfer pin may vary and are based on the real product.



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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.

