

# **PSE Technology Corporation** SPECIFICATION FOR APPROVAL

| CUSTOMER          |                                     |
|-------------------|-------------------------------------|
| NOMINAL FREQUENCY | 37.400000 MHz                       |
| PRODUCT TYPE      | TYPE FL 3.2x2.5 SEAM SEALED CRYSTAL |
| SPEC. NO. ( P/N ) | FL374WFMR1                          |
| CUSTOMER P/N      |                                     |
| ISSUE DATE        | June 17, 2016                       |
| VERSION           | A                                   |
|                   |                                     |

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

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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. FL3740019Z

### FL374WFMR1

VER. A 17-Jun-16

### **VERSION HISTORY**

| Version<br>No. | Version<br>Date | Customer Receipt<br>Date | Supplier Receipt<br>Date | Description     | Notes |
|----------------|-----------------|--------------------------|--------------------------|-----------------|-------|
| А              | Jun.17,2016     |                          |                          | Initial Release |       |
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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<br>(Frequency Deviation over the<br>Operating Temperature Range) | F/T    | ±10                | ppm   | Reference to the Frequency at 25°C |
| Operating Drive Level  |        | 10                 | μW    |                                    |
| Maximum Drive Level  |        | 150                | μW    |                                    |
| Equivalent Series Resistance   | ESR    | 30                 | 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                | 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

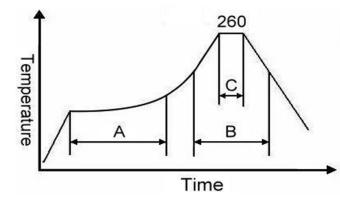
f) VIBRATION: JESD22-B103

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



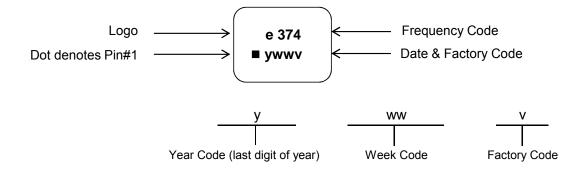
| Note: |              |             |            |  |  |
|-------|--------------|-------------|------------|--|--|
|       | Stage        | Temperature | Time       |  |  |
| Α     | Preheat      | 150~200°C   | 60~120 Sec |  |  |
| В     | Primary Heat | 217°C       | 60~150 Sec |  |  |
| C     | Peak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

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

### FL374WFMR1

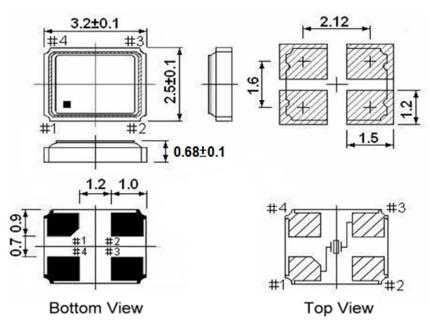
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#### **MARKING**



#### 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.

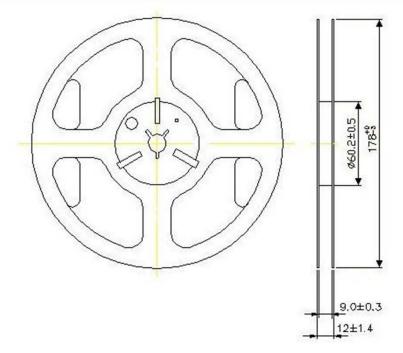


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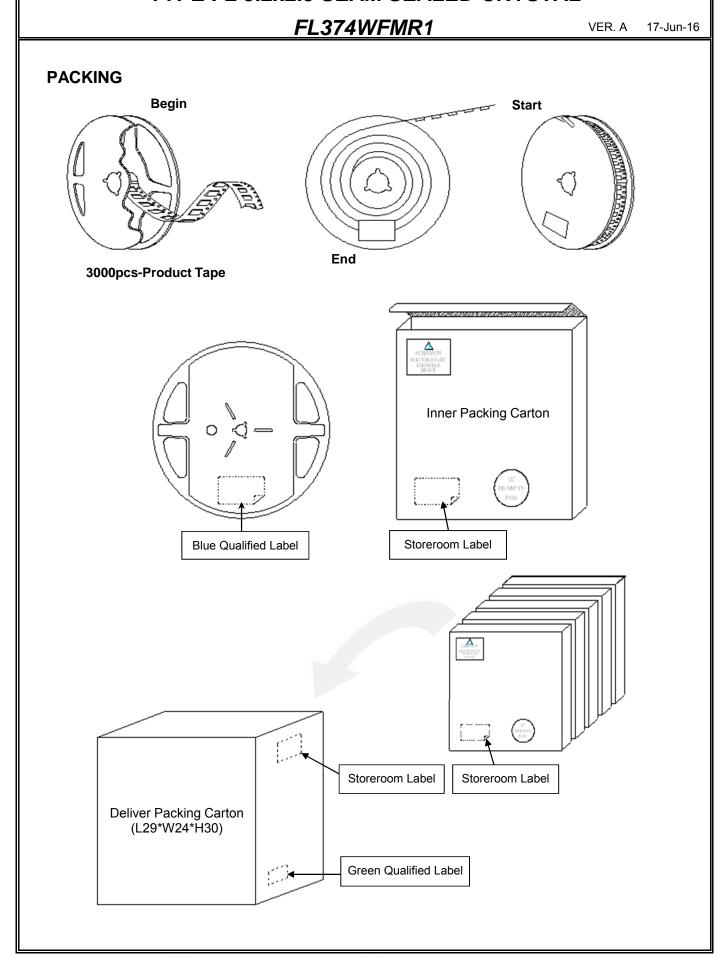
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### Tape & Reel

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- 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.



# **Mouser Electronics**

**Authorized Distributor** 

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