

# PSE Technology Corporation

## SPECIFICATION FOR APPROVAL

CUSTOMER \_\_\_\_\_

NOMINAL FREQUENCY **8.000000 MHz**

PRODUCT TYPE **TYPE FY 5.0x3.2 SEAM SEALED CRYSTAL**

PART NUMBER **FY0800018**

CUSTOMER P/N \_\_\_\_\_

ISSUE DATE **June 6, 2012**

VERSION **B**

| APPROVED   | PREPARED        | QA            |
|--|-----------------|---------------|
| <i>Brenda</i>  | <i>Nikhi Lu</i> | <i>Bedley</i> |
| APPROVED BY CUSTOMER   |                 |               |
| <p style="text-align: right;">Please return one copy with approval to PSE-TW</p> |                 |               |

### PSE Technology Corporation

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

**A Company of PERICOM Semiconductor Corporation**

# TYPE FY 5.0x3.2 SEAM SEALED CRYSTAL

***FY0800018***

VER.B 06-JUN-12

## VERSION HISTORY

| Version No. | Version Date  | Customer Receipt Date | Supplier Receipt Date | Description                         | Notes |
|-------------|---------------|-----------------------|-----------------------|-------------------------------------|-------|
| A           | May. 21, 2010 |                       |                       | Initial Release                     |       |
| B           | Jun. 6, 2012  |                       |                       | Updated Suggested IR Reflow Profile |       |

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## ELECTRICAL SPECIFICATIONS

| Item  | Symbol | Specifications     | Units | Notes                              |
|---|--------|--------------------|-------|------------------------------------|
| Nominal Frequency   | Fn     | 8.000000           | MHz   |                                    |
| Mode of Oscillation   | MO     | AT Cut-Fundamental |       |                                    |
| Calibration Load Capacitance  | CL     | 18                 | pF    |                                    |
| Calibration Tolerance   | FL     | ± 30               | 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    | ± 30               | ppm   | Reference to the Frequency at 25°C |
| Operating Drive Level   |        | 10                 | μW    |                                    |
| Maximum Drive Level   |        | 100                | μW    |                                    |
| Equivalent Series Resistance  | ESR    | 100                | 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                | 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).

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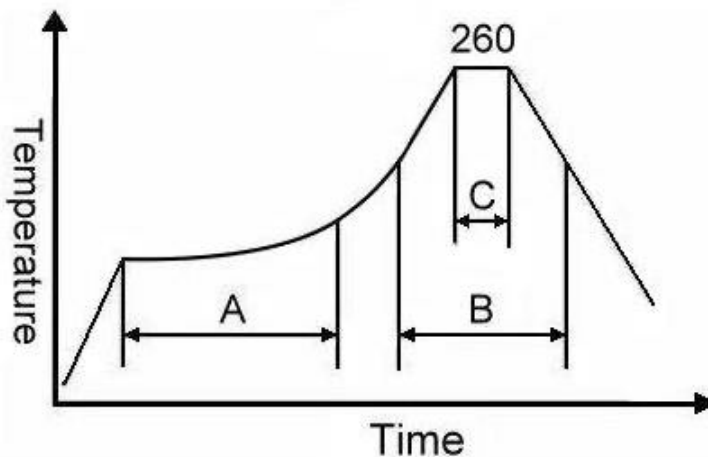
## RELIABILITY SPECIFICATIONS

### 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       |
|---|--------------|-------------|------------|
| A | Preheat      | 150~200°C   | 60~120 Sec |
| B | Primary Heat | 217°C       | 60~150 Sec |
| C | Peak         | 260°C       | 10 Sec     |

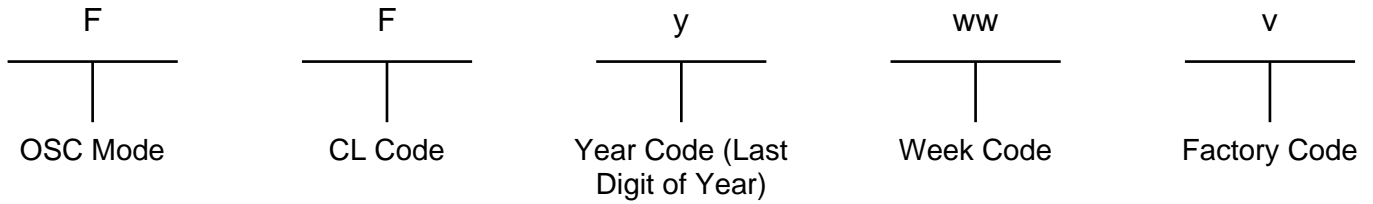
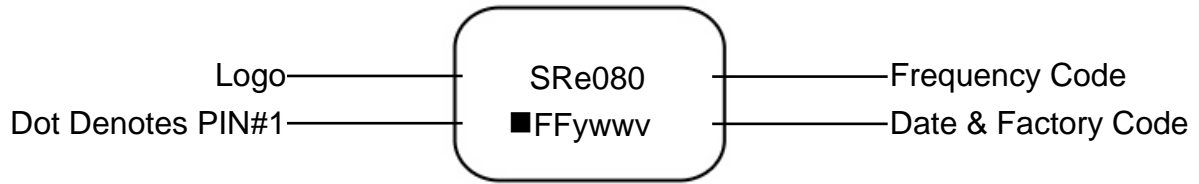
For soldering reflow profile and reliability test ratings go to: <http://www.pericom.com/pdf/sre/reflow.pdf>

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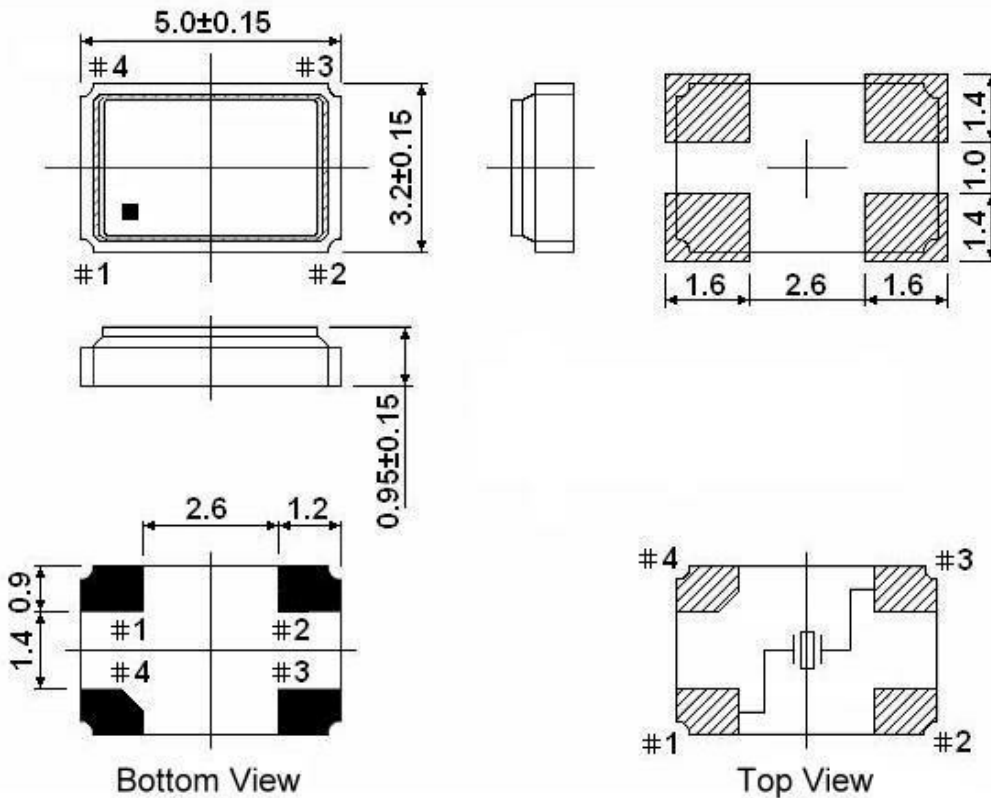
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## MARKING



## 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.





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## PACKING

