



**THE DATASHEET OF
FW2500016Z**



PSE Technology Corporation

SPECIFICATION FOR APPROVAL

CUSTOMER _____

NOMINAL FREQUENCY **25.000000 MHz**

PRODUCT TYPE **TYPE FW 2.0x1.6 SEAM SEALED CRYSTAL**

PART NUMBER **FW2500016Z**

CUSTOMER P/N _____

ISSUE DATE **October 15, 2013**

VERSION **B**

| APPROVED | PREPARED | QA |
|---|---|---|
|  |  |  |
| APPROVED BY CUSTOMER | | |
| Please return one copy with approval to PSE-TW | | |

PSE Technology Corporation

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

A Company of PERICOM Semiconductor Corporation

TYPE FW 2.0x1.6 SEAM SEALED CRYSTAL

FW2500016Z

VER.B 15-OCT-13

VERSION HISTORY

| Version No. | Version Date | Customer Receipt Date | Supplier Receipt Date | Description | Notes |
|-------------|---------------|-----------------------|-----------------------|---|-------|
| A | Aug. 19, 2013 | | | Initial Release | |
| B | Oct. 15, 2013 | | | Updated Pin2 & Pin4 to connect GND as an option | |

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ELECTRICAL SPECIFICATIONS

| Item | Symbol | Specifications | Units | Notes |
|---|--------|--------------------|-------|------------------------------------|
| Nominal Frequency | Fn | 25.000000 | MHz | |
| Mode of Oscillation | MO | AT Cut-Fundamental | | |
| Calibration Load Capacitance | CL | 6 | pF | |
| Calibration Tolerance | FL | ± 30 | ppm | at 25°C±3°C |
| Operating Temperature Range | TR | -30 to +85 | °C | |
| Frequency Stability(Frequency Deviation over the Operating Temperature Range) | F/T | ± 40 | ppm | Reference to the Frequency at 25°C |
| Operating Drive Level | | 10 | μW | |
| Maximum Drive Level | | 300 | 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).

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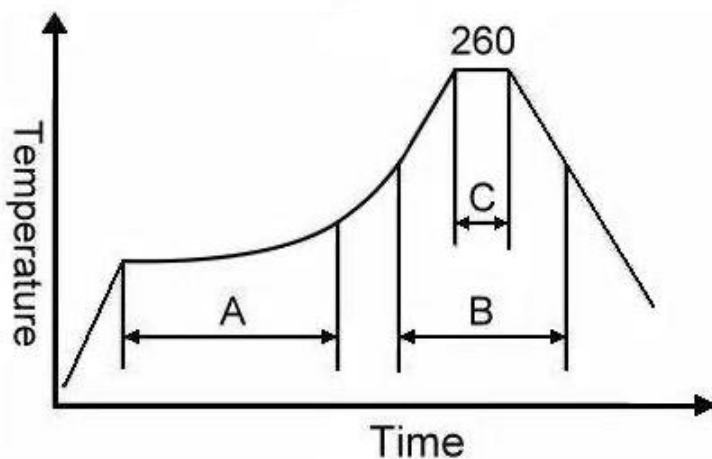
RELIABILITY SPECIFICATIONS

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 |

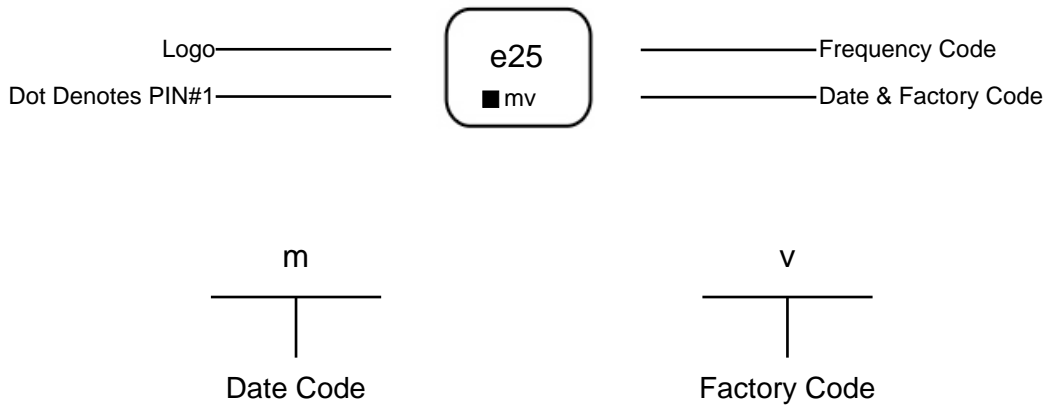
For soldering reflow profile and reliability test ratings go to: <http://www.pericom.com/pdf/sre/reflow.pdf>

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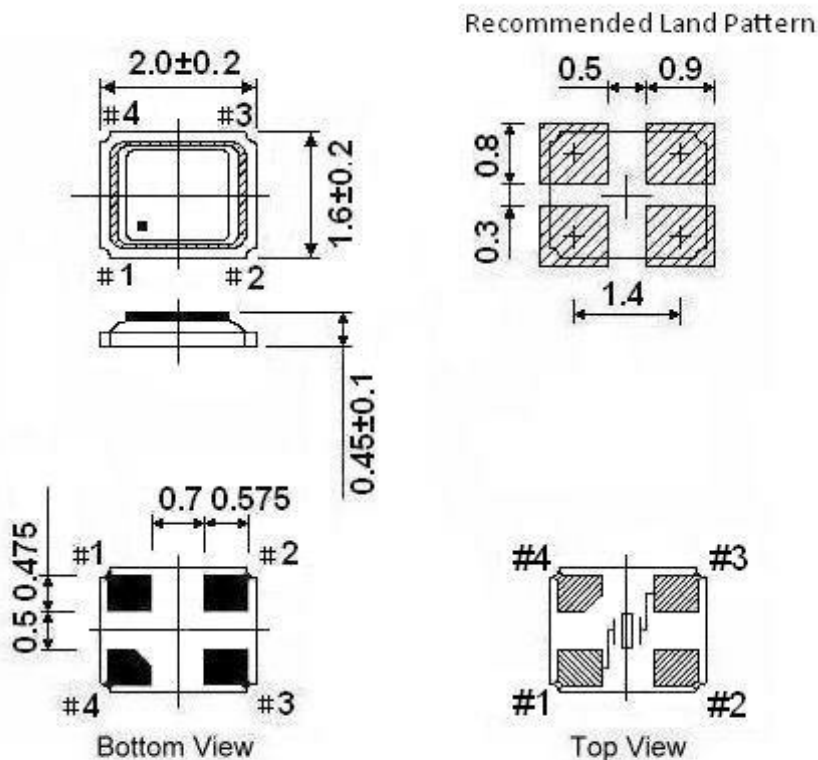
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MARKING



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



** Recommended - Pin 1 & 3: CRYSTAL
Pin 2 & 4: GND or NC (Optional)

Notes:

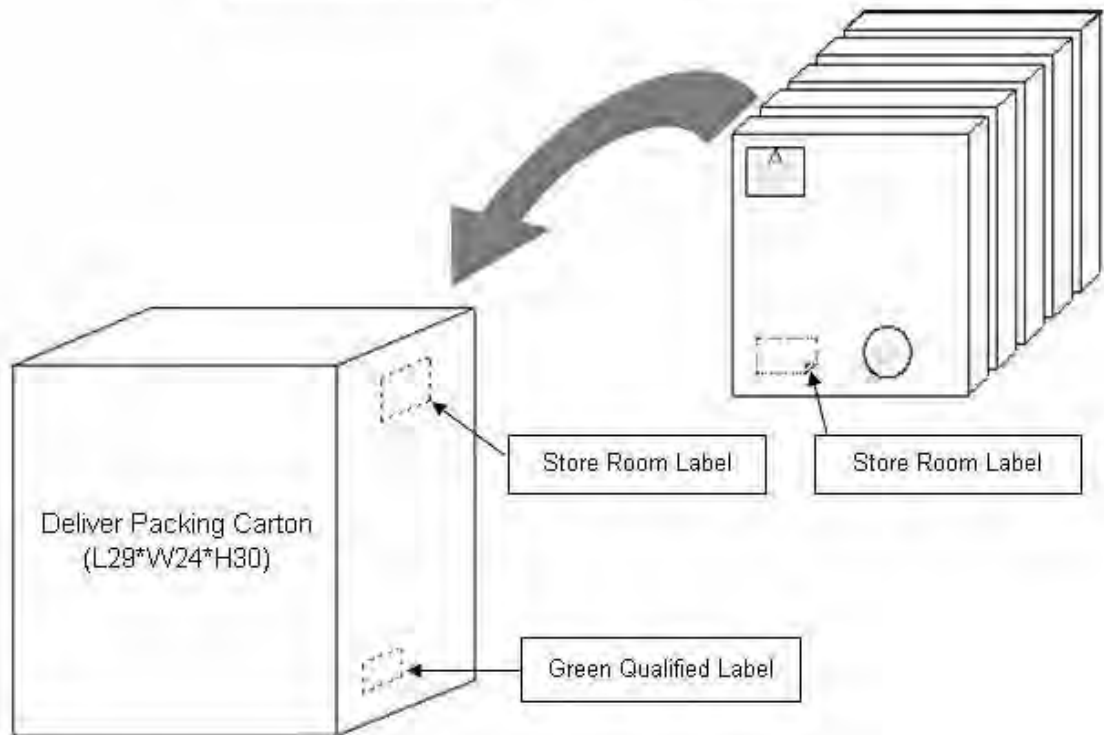
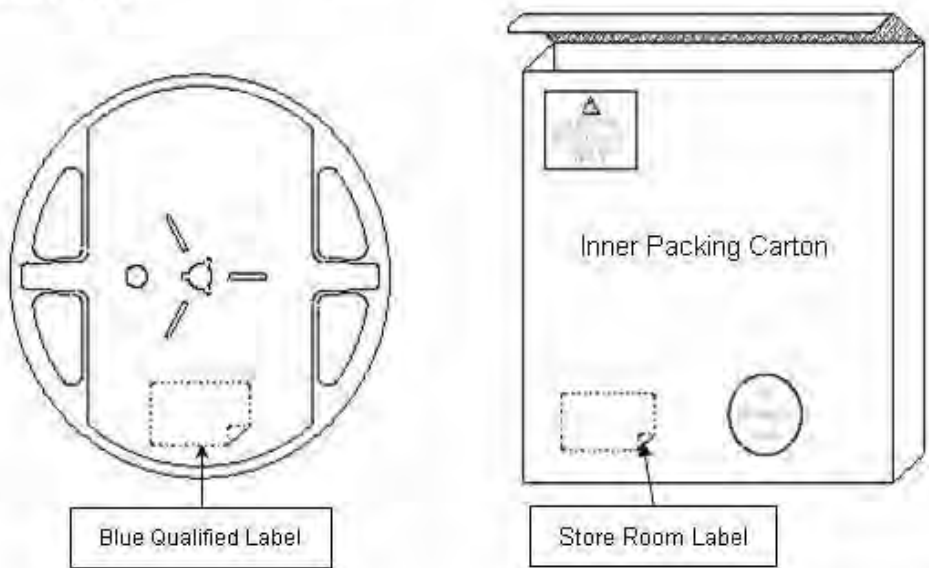
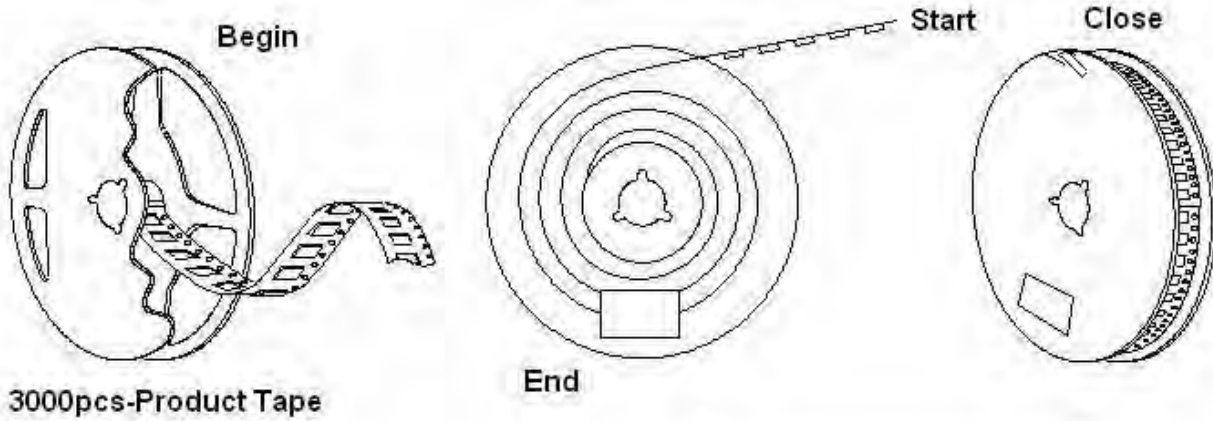
1. Package drawings are for reference only, and the appearances of objects may vary. Actual packages are based on the real product.
2. The marking dot denotes Pin#1.
3. The position and shape of the chamfer pin may vary and are based on the real product.

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PACKING



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- ⊖ [Diodes Incorporated Information](#)

Optimize Your Supply Chain with WIN SOURCE Solutions

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- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management