
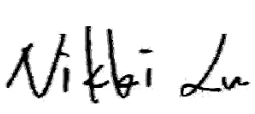
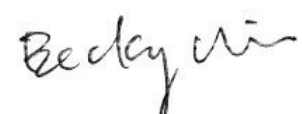


PSE Technology Corporation

SPECIFICATION FOR APPROVAL

| | |
|-------------------|-------------------------------------|
| CUSTOMER | _____ |
| NOMINAL FREQUENCY | 24.000000 MHz |
| PRODUCT TYPE | TYPE FW 2.0x1.6 SEAM SEALED CRYSTAL |
| SPEC. NO. (P/N) | FW2400001 |
| CUSTOMER P/N | _____ |
| ISSUE DATE | June 21, 2012 |
| VERSION | C |

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

PSE Technology Corporation

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 Chung Li City, Taoyuan County, Taiwan (R.O.C.)
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 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 ***

TYPE FW 2.0x1.6 SEAM SEALED CRYSTAL

FW2400001

VER. C 21-Jun-12

ELECTRICAL SPECIFICATIONS

| Item | Symbol | Specifications | Units | Notes |
|--------------------------------------------------------------------------------------|--------|--------------------|-------|---------------------------------------|
| Nominal Frequency | Fn | 24.000000 | MHz | |
| Mode of Oscillation | MO | AT Cut-Fundamental | | |
| Calibration Load Capacitance | CL | 20 | pF | |
| Calibration Tolerance | FL | ±50 | ppm | at 25°C±3°C |
| Operating Temperature Range | TR | -20 to +70 | °C | |
| Frequency Stability (Frequency Deviation over the Operating Temperature Range) | F/T | ±50 | ppm | Reference to the Frequency at 25°C |
| Operating Drive Level | | 10 | μW | |
| Maximum Drive Level | | 100 | μW | Max. |
| Equivalent Series Resistance | ESR | 70 | Ω | Max |
| Shunt Capacitance | C0 | 3 | pF | Max |
| Aging at 25°C | | ±5 | 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).

TYPE FW 2.0x1.6 SEAM SEALED CRYSTAL

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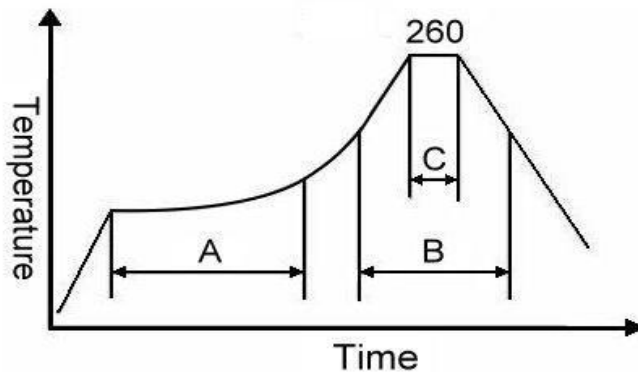
RELIABILITY SPECIFICATIONS

MECHANICAL AND ENVIRONMENTAL RATINGS:

- a) FINE LEAK TEST: JESD22-A109 (Condition 1A)
(3×10^{-9} Pa m³/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 |

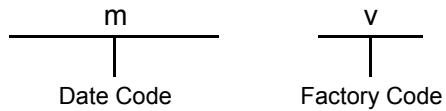
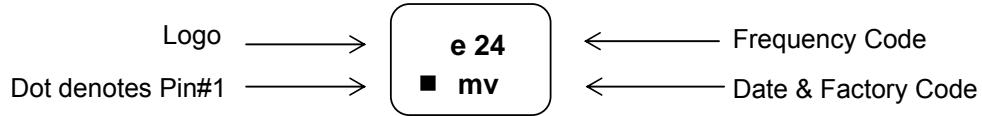
For soldering reflow profile and reliability test ratings go to: <http://www.pericom.com/pdf/sre/reflow.pdf>

TYPE FW 2.0x1.6 SEAM SEALED CRYSTAL

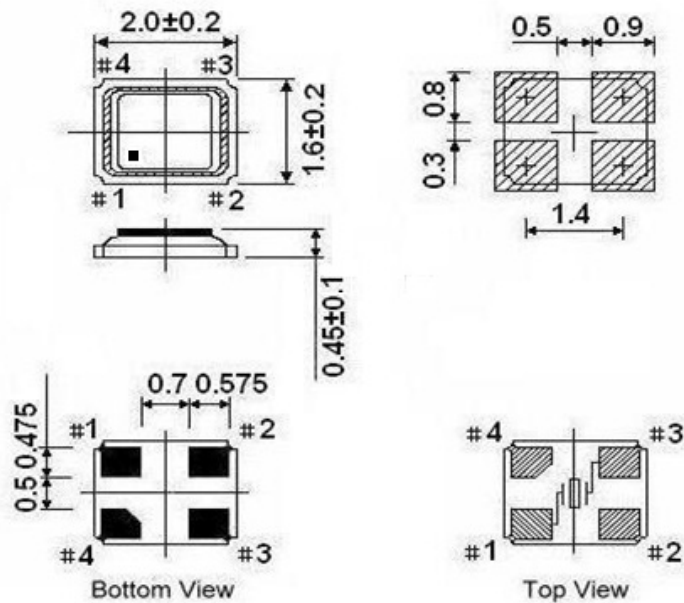
FW2400001

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MARKING



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



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

Note:

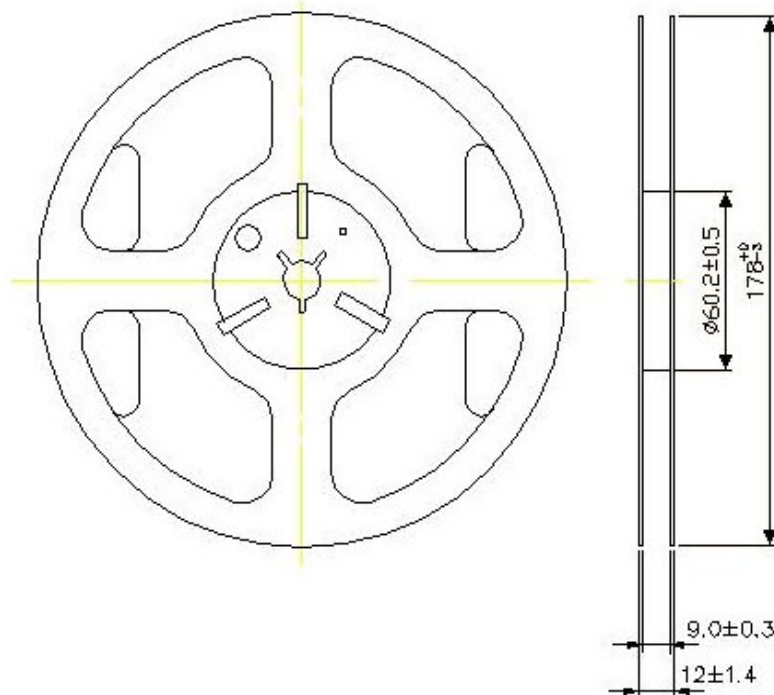
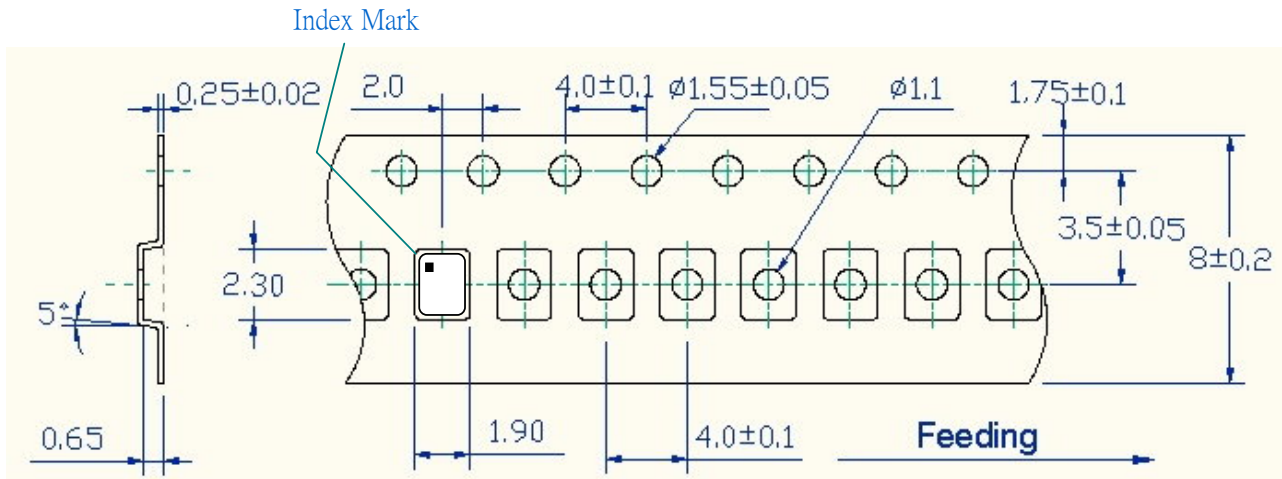
1. The marking dot denotes Pin#1.
2. Pin positions of the drawing is only for reference, and the Pin with chamfer is based on the real product.

TYPE FW 2.0x1.6 SEAM SEALED CRYSTAL

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Tape & Reel



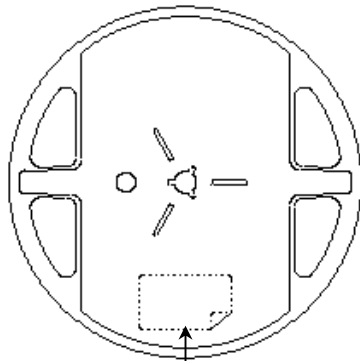
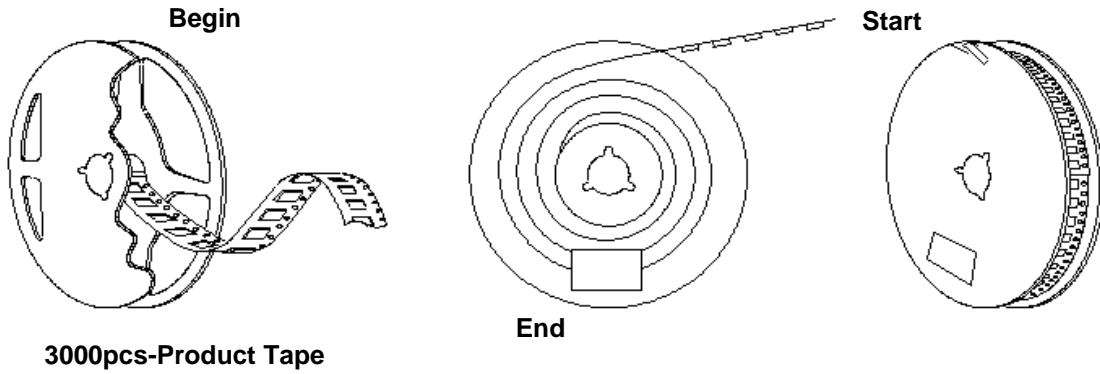
1. 230mm minimum leader which consist of carrier and/or tape followed by a minimum of 160mm of empty carrier tape sealed with cover tape.
2. 160mm minimum trailer of empty carrier tape sealed with cover tape.

TYPE FW 2.0x1.6 SEAM SEALED CRYSTAL

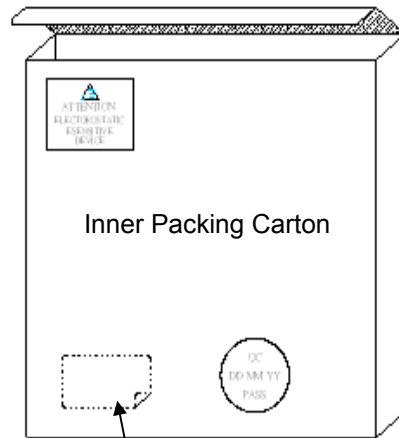
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PACKING



Blue Qualified Label



Storeroom Label

