
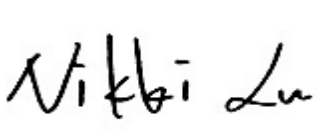
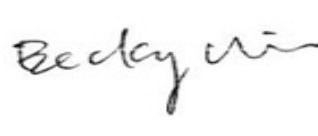


PSE Technology Corporation

SPECIFICATION FOR APPROVAL

| | |
|-------------------|--|
| CUSTOMER | _____ |
| NOMINAL FREQUENCY | 25.000000 MHz |
| PRODUCT TYPE | TYPE FL 3.2x2.5 SEAM SEALED CRYSTAL |
| PART NUMBER | FL2500123Z |
| CUSTOMER P/N | _____ |
| ISSUE DATE | June 6, 2014 |
| VERSION | C |

| APPROVED | PREPARED | QA |
|---|---|---|
|  |  |  |
| APPROVED BY CUSTOMER | | |
| Please return one copy with 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

TYPE FL 3.2x2.5 SEAM SEALED CRYSTAL

FL2500123Z

VER.C 06-JUN-14

VERSION HISTORY

| Version No. | Version Date | Customer Receipt Date | Supplier Receipt Date | Description | Notes |
|-------------|---------------|-----------------------|-----------------------|---|-------|
| A | Dec. 8, 2011 | | | Initial Release | |
| B | Dec. 23, 2011 | | | Changed Maximum Drive Level from 100uW to 500uW | |
| C | Jun. 6, 2014 | | | Added Motional Capacitance 3.13fF & Motional Inductance 12.96mH | |

TYPE FL 3.2x2.5 SEAM SEALED CRYSTAL

FL2500123Z

VER.C 06-JUN-14

ELECTRICAL SPECIFICATIONS

| Item | Symbol | Specifications | Units | Notes |
|---|--------|--------------------|-------|------------------------------------|
| Nominal Frequency | Fn | 25.000000 | MHz | |
| Mode of Oscillation | MO | AT Cut-Fundamental | | |
| Calibration Load Capacitance | CL | 20 | pF | |
| Calibration Tolerance | FL | ± 30 | ppm | at 25°C±3°C |
| Operating Temperature Range | TR | -20 to +80 | °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 | | 500 | μW | |
| Equivalent Series Resistance | ESR | 50 | Ω | Max. |
| Shunt Capacitance | C0 | 5 | pF | Max. |
| Motional Capacitance | C1 | 3.13 | fF | Typ. |
| Motional Inductance | L1 | 12.96 | mH | Typ. |
| 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 FL 3.2x2.5 SEAM SEALED CRYSTAL

FL2500123Z

VER.C 06-JUN-14

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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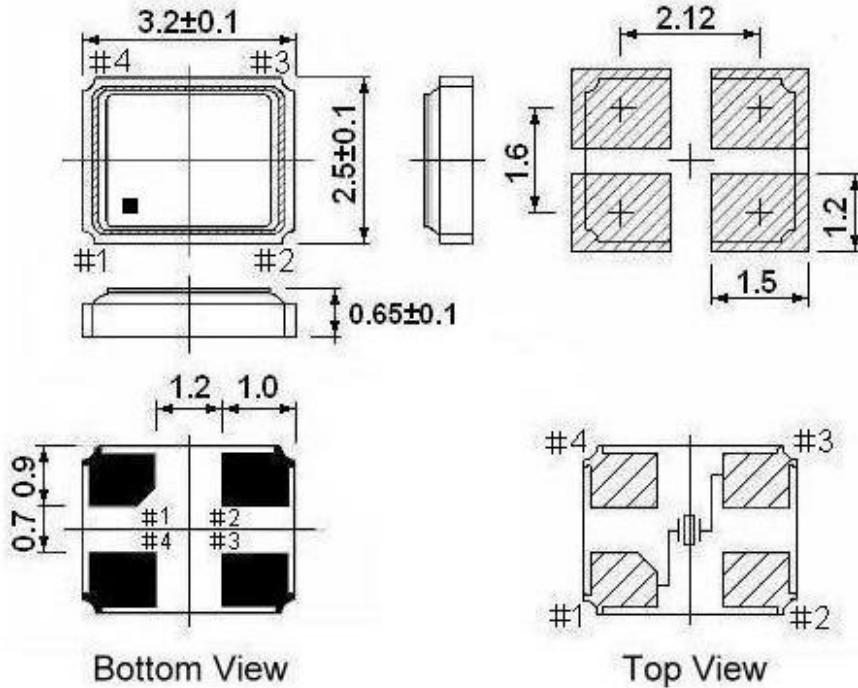
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MARKING



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

Recommended Land Pattern



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

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.

TYPE FL 3.2x2.5 SEAM SEALED CRYSTAL

FL2500123Z

VER.C 06-JUN-14

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 FL 3.2x2.5 SEAM SEALED CRYSTAL

FL2500123Z

VER.C 06-JUN-14

PACKING

