



PSE Technology Corporation

SPECIFICATION FOR APPROVAL

CUSTOMER _____

NOMINAL FREQUENCY _____ 40.000000 MHz _____

PRODUCT TYPE _____ **TYPE FL 3.2x2.5 SEAM SEALED CRYSTAL** _____

SPEC. NO. (P/N) _____ FL400WFQA1 _____

CUSTOMER P/N _____

ISSUE DATE _____ June 22, 2016 _____

VERSION _____ A _____

| APPROVED | PREPARED | QA |
|--|--------------|-------------------|
| <i>Brenda</i> | <i>Clair</i> | <i>Song Yang</i> |
| APPROVED BY CUSTOMER : | | AVL Status |
| Please return one copy with approval to PSE-TW | | |

PSE Technology Corporation

No.2, Tzu-Chiang 5th Rd, Chung Li Industrial Park,
 Chung Li City, Taoyuan County, Taiwan (R.O.C.)
 TEL: 886-3-451-8888
 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** ***

Pericom Internal Reference NO. FL4000239Z

TYPE FL 3.2x2.5 SEAM SEALED CRYSTAL

FL400WFQA1

VER. A 22-Jun-16

VERSION HISTORY

| Version No. | Version Date | Customer Receipt Date | Supplier Receipt Date | Description | Notes |
|-------------|--------------|-----------------------|-----------------------|-----------------|-------|
| A | Jun.22,2016 | | | Initial Release | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |



TYPE FL 3.2x2.5 SEAM SEALED CRYSTAL

FL400WFQA1

VER. A 22-Jun-16

ELECTRICAL SPECIFICATIONS

| Item | Symbol | Specifications | Units | Notes |
|--|--------|--------------------|-------|------------------------------------|
| Nominal Frequency | Fn | 40.000000 | MHz | |
| Mode of Oscillation | MO | AT Cut-Fundamental | | |
| Calibration Load Capacitance | CL | 7 | pF | |
| Calibration Tolerance | FL | ±10 | 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 | ±10 | ppm | Reference to the Frequency at 25°C |
| Operating Drive Level | | 10 | μW | |
| Maximum Drive Level | | 100 | μW | |
| Equivalent Series Resistance | ESR | 40 | 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).

TYPE FL 3.2x2.5 SEAM SEALED CRYSTAL

FL400WFQA1

VER. A 22-Jun-16

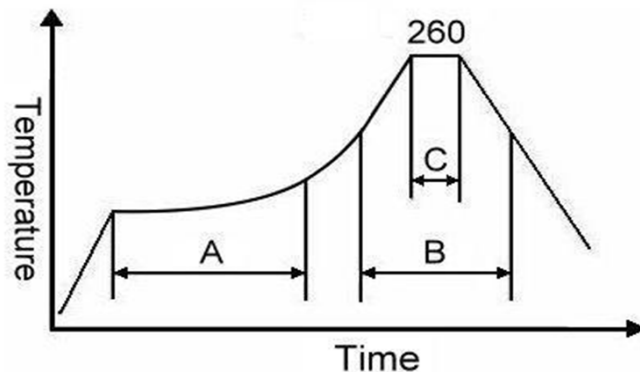
RELIABILITY SPECIFICATIONS

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 |

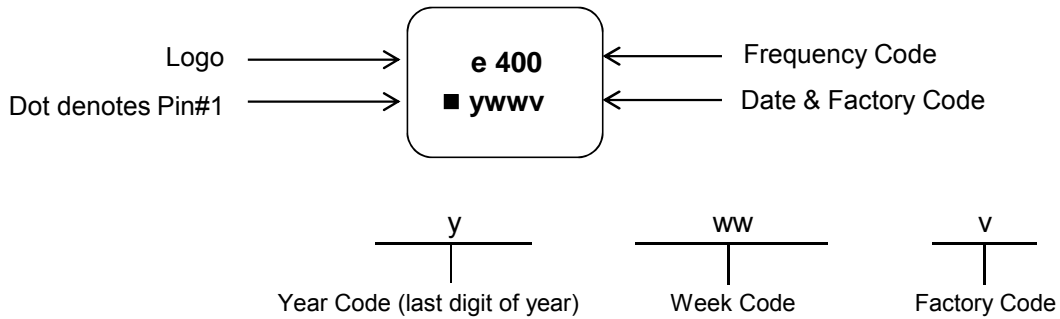
For soldering reflow profile and reliability test ratings go to: <http://www.pericom.com/pdf/sre/reflow.pdf>

TYPE FL 3.2x2.5 SEAM SEALED CRYSTAL

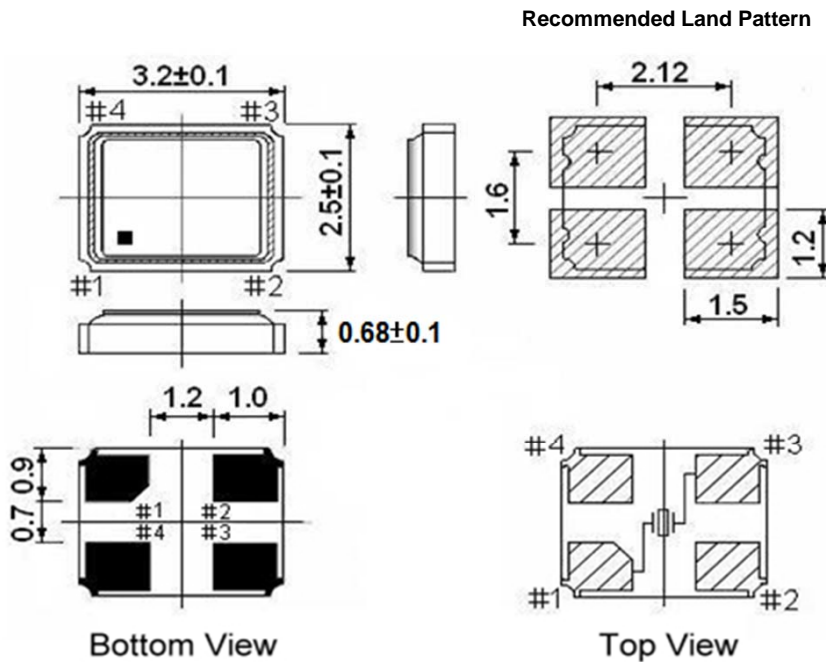
FL400WFQA1

VER. A 22-Jun-16

MARKING



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



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

Notes:

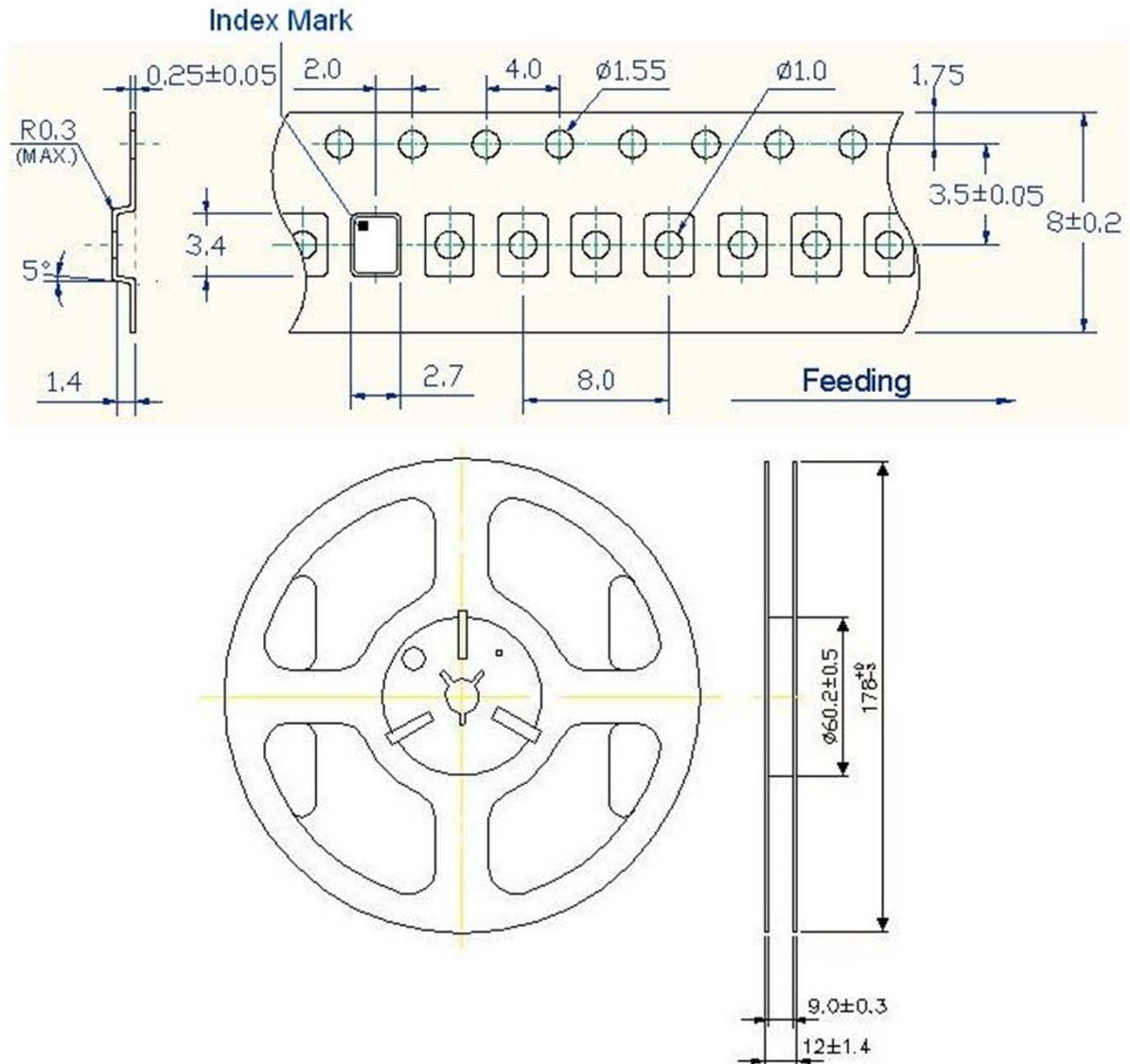
1. Package drawings are for reference only, and the appearances of objects may vary.
Actual packages are based on the real product.
2. The marking dot denotes Pin#1.
3. The position and shape of the chamfer pin may vary and are based on the real product.

TYPE FL 3.2x2.5 SEAM SEALED CRYSTAL

FL400WFQA1

VER. A 22-Jun-16

Tape & Reel



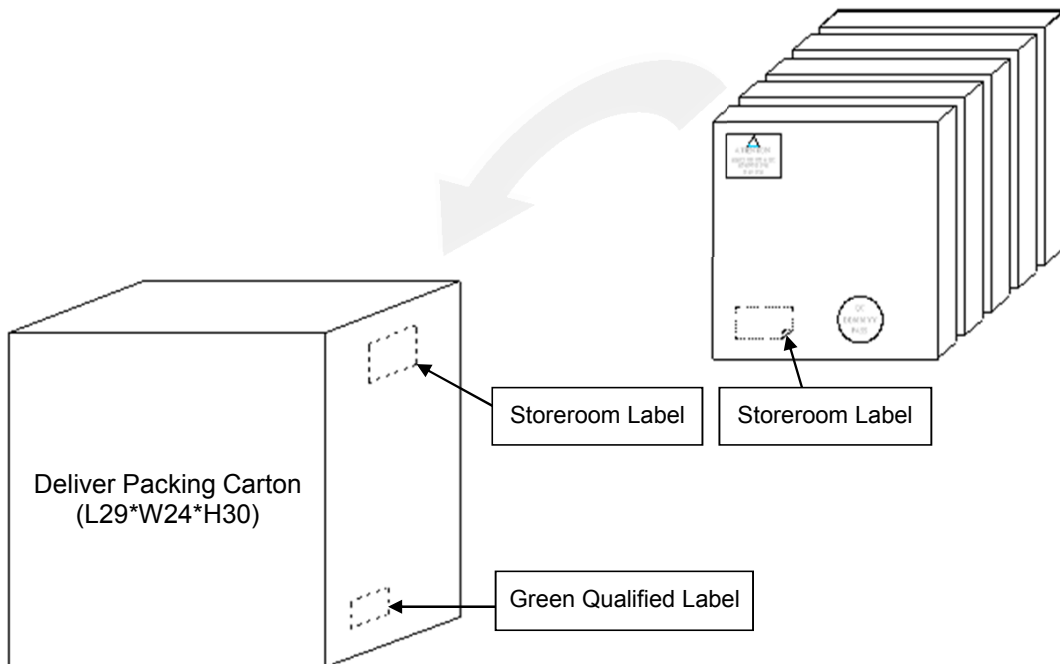
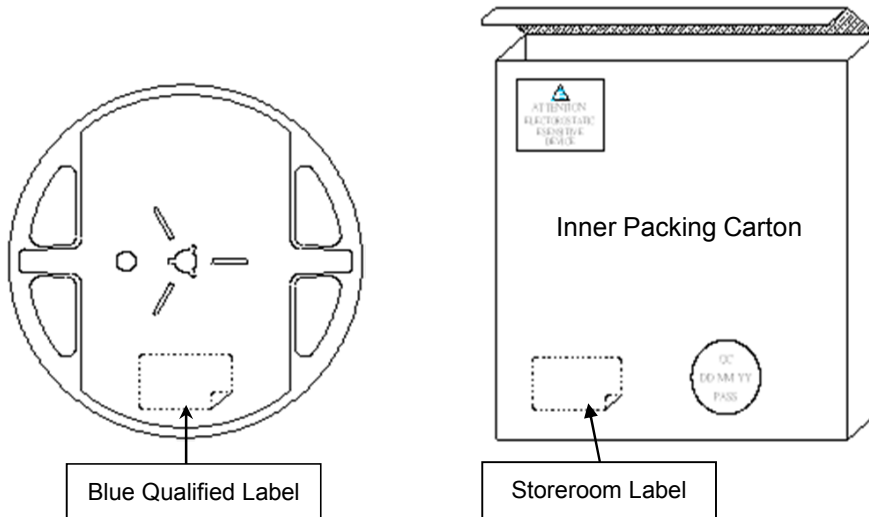
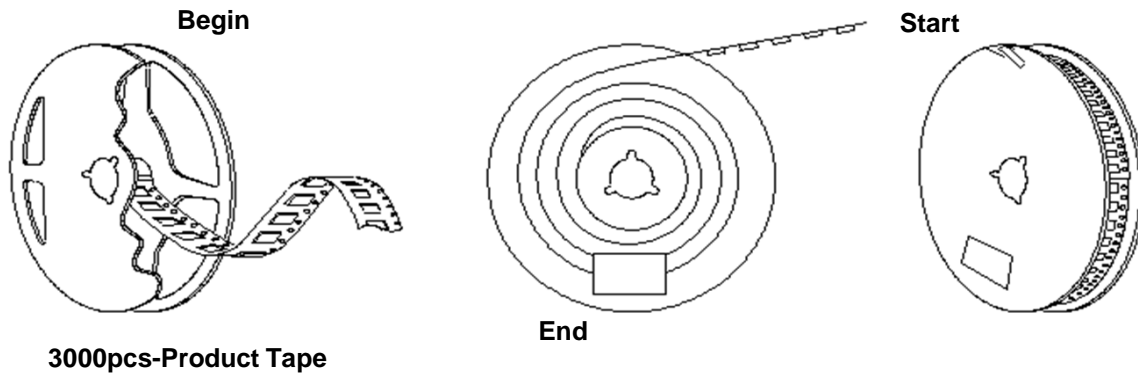
1. 230mm minimum leader which consist of carrier and/or tape followed by a minimum of 160mm of empty carrier tape sealed with cover tape.
2. 160mm minimum trailer of empty carrier tape sealed with cover tape.

TYPE FL 3.2x2.5 SEAM SEALED CRYSTAL

FL400WFQA1

VER. A 22-Jun-16

PACKING



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Diodes Incorporated:](#)

[FL400WFQA1](#)