
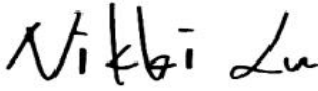



# PSE Technology Corporation

## SPECIFICATION FOR APPROVAL

|                   |                                    |
|-------------------|------------------------------------|
| CUSTOMER          |                                    |
| NOMINAL FREQUENCY | 8.000000 MHz                       |
| PRODUCT TYPE      | TYPE F9 5x3.2 GLASS SEALED CRYSTAL |
| PART NUMBER       | F90800021                          |
| CUSTOMER P/N      |                                    |
| ISSUE DATE        | May 16, 2013                       |
| VERSION           | B                                  |

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

### 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/>

\*RoHS Exemption  
\*HF-Halogen Free  
\*REACH Compliant

**A Company of PERICOM Semiconductor Corporation**

# TYPE F9 5x3.2 GLASS SEALED CRYSTAL

***F90800021***

VER.B 16-MAY-13

## VERSION HISTORY

| Version No. | Version Date  | Customer Receipt Date | Supplier Receipt Date | Description                | Notes |
|-------------|---------------|-----------------------|-----------------------|----------------------------|-------|
| A           | Jan. 6, 2012  |                       |                       | Initial Release            |       |
| B           | May. 16, 2013 |                       |                       | Updated mechanical drawing |       |

# TYPE F9 5x3.2 GLASS SEALED CRYSTAL

**F90800021**

VER.B 16-MAY-13

## 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     | $\pm 20$           | ppm           | at 25°C $\pm 3^{\circ}\text{C}$    |
| Operating Temperature Range   | TR     | -40 to +85         | °C            |                                    |
| Frequency Stability(Frequency Deviation over the Operating Temperature Range) | F/T    | $\pm 30$           | ppm           | Reference to the Frequency at 25°C |
| Operating Drive Level   |        | 10                 | $\mu\text{W}$ |                                    |
| Maximum Drive Level   |        | 100                | $\mu\text{W}$ |                                    |
| Equivalent Series Resistance  | ESR    | 100                | $\Omega$      | Max.                               |
| Shunt Capacitance   | C0     | 5                  | pF            | Max.                               |
| Aging at 25°C   |        | $\pm 5$            | ppm           | Max, 1st year                      |
| Storage Temperature   |        | -55 to +125        | °C            |                                    |
| Insulation Resistance   |        | 500                | M $\Omega$    | Min                                |

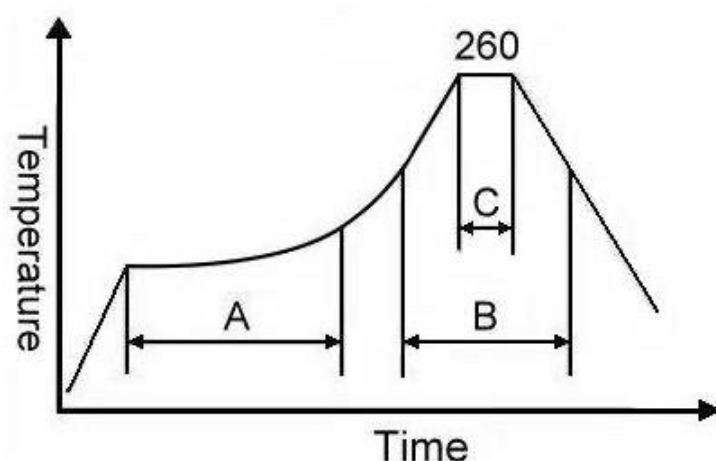
### RELIABILITY SPECIFICATIONS

#### 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     |

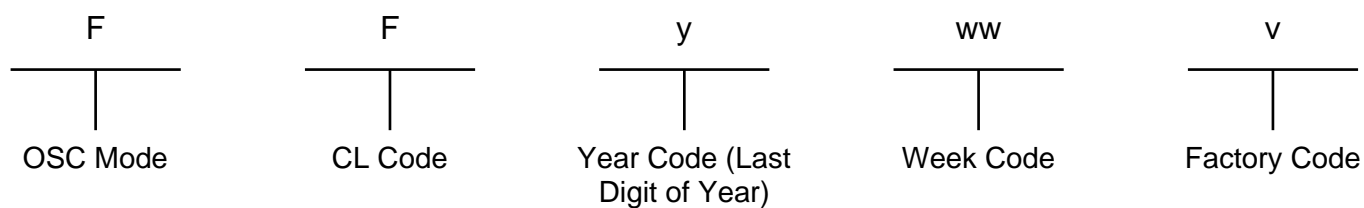
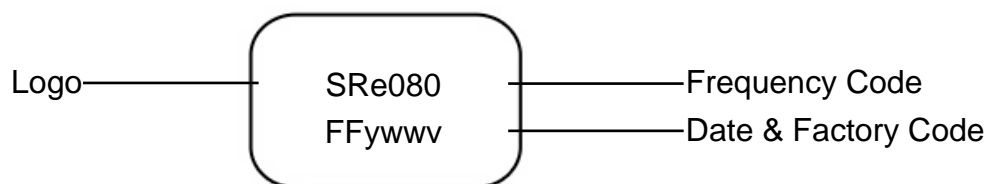
For soldering reflow profile and reliability test ratings go to: <http://www.pericom.com/pdf/sre/reflow.pdf>

# TYPE F9 5x3.2 GLASS SEALED CRYSTAL

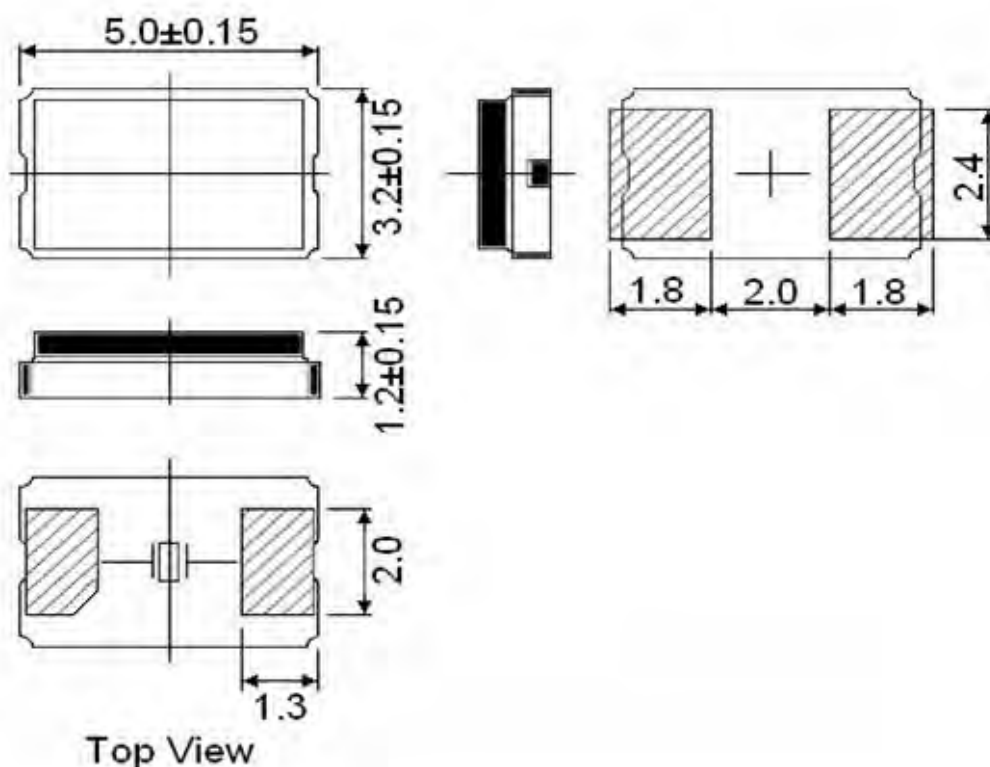
**F90800021**

VER.B 16-MAY-13

## MARKING



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



### Note:

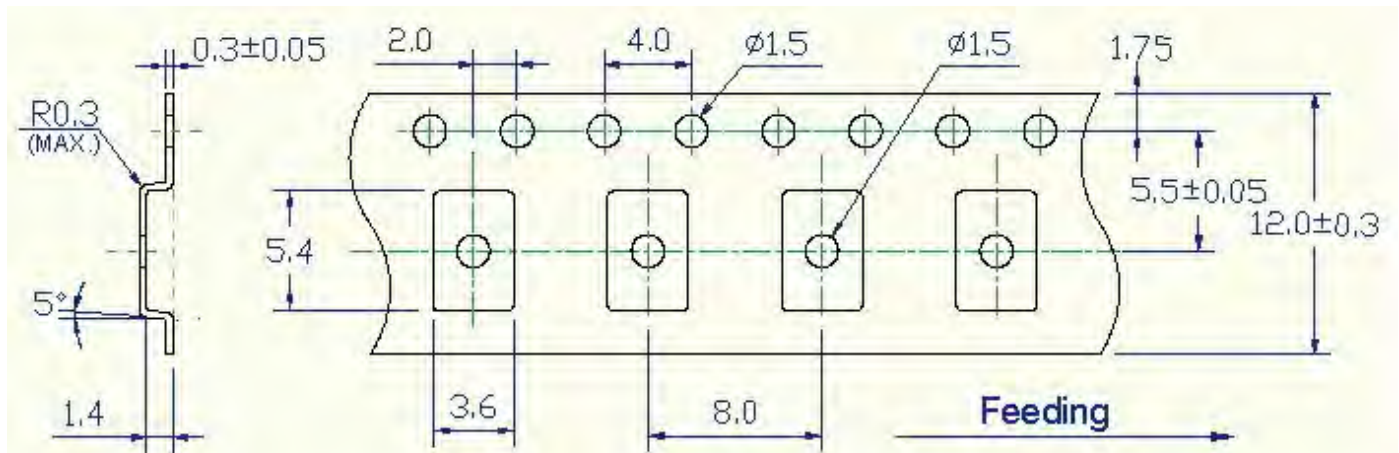
Pin shape is only for reference, and the Pin with chamfer or without chamfer is based on the real product.

# TYPE F9 5x3.2 GLASS SEALED CRYSTAL

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## Tape & Reel



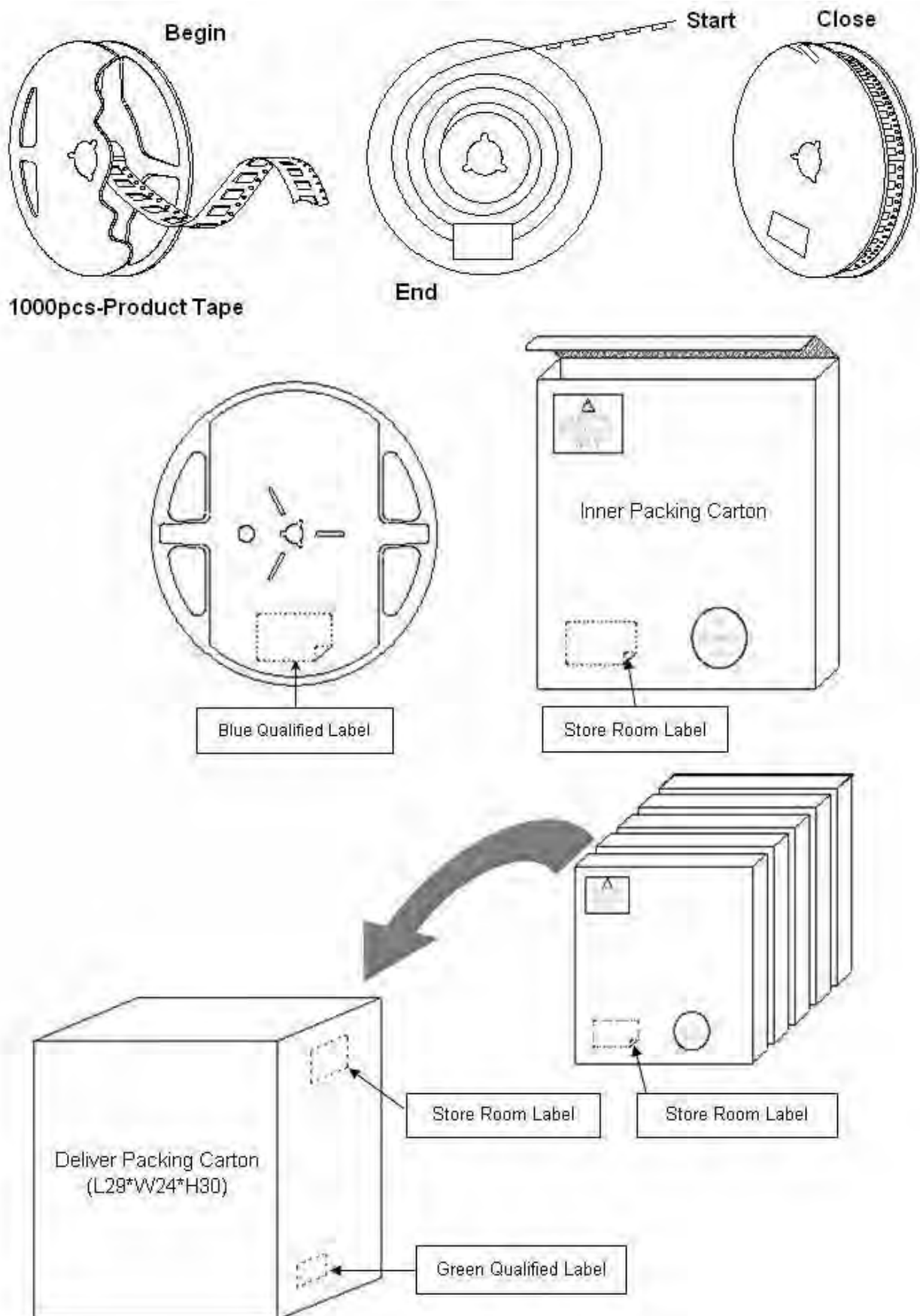
1. 230mm minimum leader which consist of carrier and/or tape followed by a minimum of 160mm of empty carrier tape sealed with cover tape.
2. 160mm minimum trailer of empty carrier tape sealed with cover tape.

# TYPE F9 5x3.2 GLASS SEALED CRYSTAL

**F90800021**

VER.B 16-MAY-13

## PACKING





# Mouser Electronics

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