

PSE Technology Corporation

SPECIFICATION FOR APPROVAL

| CUSTOMER | |
|-------------------|--------------------------------|
| NOMINAL FREQUENCY | 25.000000 MHz |
| PRODUCT TYPE | TYPE GC 49S SMD QUARTZ CRYSTAL |
| SPEC. NO. (P/N) | GC2500118 |
| CUSTOMER P/N | |
| ISSUE DATE | March 22, 2011 |
| VERSION | С |

| APPROVED | PREPARED | QA |
|--------------------------|-------------------------|------------|
| Brenda | Clane | Gather |
| APPROVED BY | CUSTOMER: | AVL Status |
| Please return one copy w | vith 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

*RoHS Compliant

*HF-Halogen Free

*REACH Compliant



*** A company of PERICOM Semiconductor Corporation ***

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VERSION HISTORY

| Version No. | Version Date | Customer Receipt Date | Supplier Receipt Date | Description | Notes |
|----------------|-----------------|--------------------------|--------------------------|--|-------|
| Α | Oct.6,2008 | | | Initial Release | |
| В | Sep.9,2010 | | | New Logo | |
| С | Mar.22,2011 | | | Updated Suggested IR Reflow Profile & Format | |
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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 | 20 | pF | |
| Calibration Tolerance | FL | ±30 | ppm | at 25°C±3°C |
| Operating Temperature Range | TR | 0 to +70 | °C | |
| Frequency Stability (Frequency Deviation over the Operating Temperature Range) | F/T | ±30 | ppm | Reference to the Frequency at 25°C |
| Operating Drive Level | | 100 | μW | |
| Maximum Drive Level | | 500 | μW | |
| Equivalent Series Resistance | ESR | 20 | Ω | Max |
| Shunt Capacitance | C0 | 6 | pF | Max |
| Aging at 25°C | | ±5 | ppm | Max, 1st year |
| Storage Temperature | | -55 to +125 | °C | |
| Insulation Resistance | | 500 | МΩ | Min |

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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

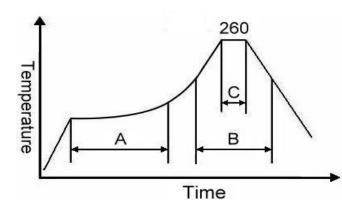
f) VIBRATION: JESD22-B103

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



| | Stage | Temperature | Time |
|---|--------------|-------------|------------|
| Α | Preheat | 150~200°C | 60~120 Sec |
| В | Primary Heat | 217°C | 60~150 Sec |
| С | Peak | 260°C | 10 Sec |

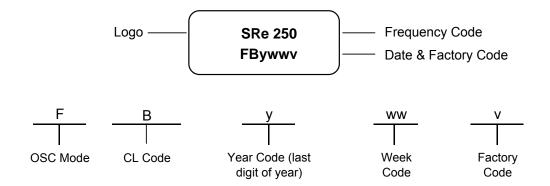
For soldering reflow profile and reliability test ratings go to: http://www.pericom.com/pdf/sre/reflow.pdf

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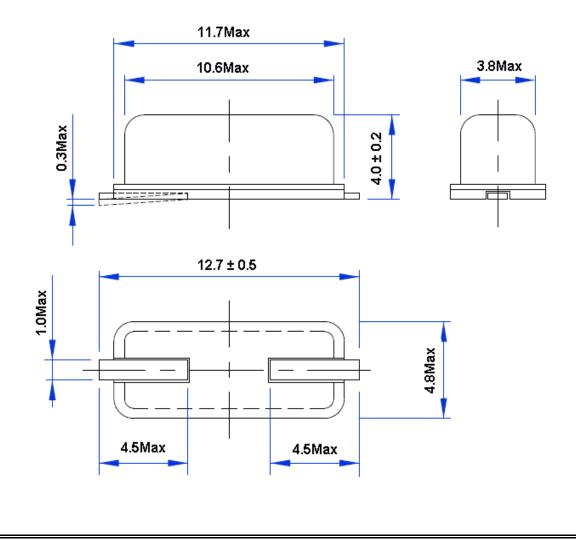
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MARKING

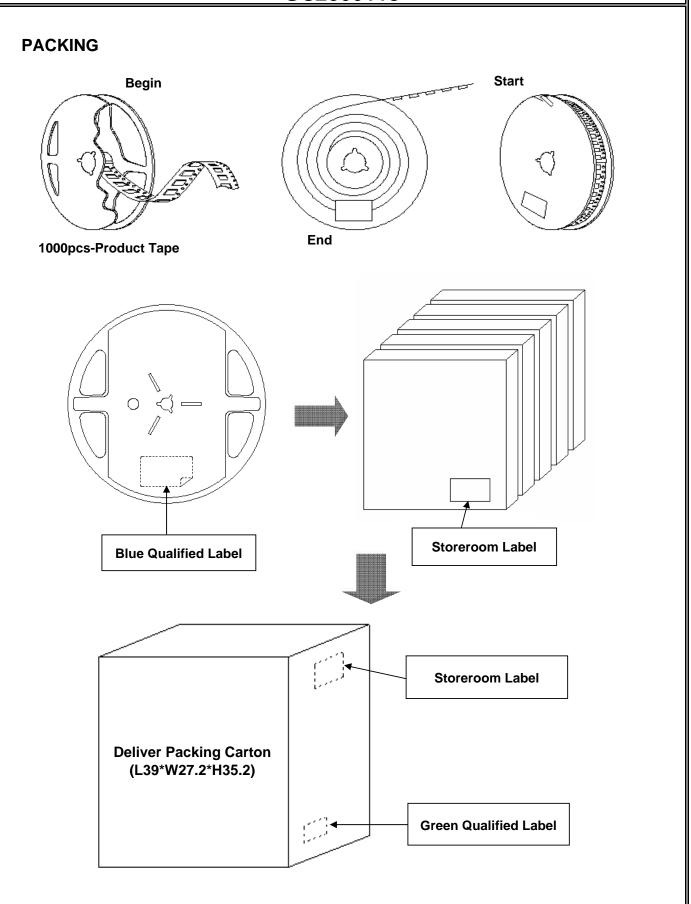


MECHANICAL DRAWINGS (Scale: None. Dimensions are in mm.)





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