

PSE Technology Corporation

SPECIFICATION FOR APPROVAL

CUSTOMER _____

NOMINAL FREQUENCY 12.000000 MHz


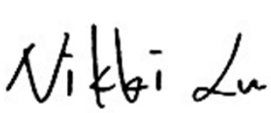
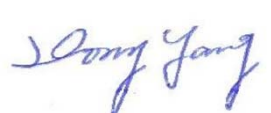
PRODUCT TYPE TYPE GC 49S SMD QUARTZ CRYSTAL

SPEC. NO. (P/N) GC1200050

CUSTOMER P/N _____

ISSUE DATE June 14, 2016

VERSION A

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

PSE Technology Corporation

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<http://www.saronix-ecera.com.tw>

*RoHS Compliant
 *HF-Halogen Free
 *REACH Compliant

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

TYPE GC 49S SMD QUARTZ CRYSTAL

GC1200050

VER. A 14-Jun-16

ELECTRICAL SPECIFICATIONS

| Item | Symbol | Specifications | Units | Notes |
|--|--------|--------------------|-------|------------------------------------|
| Nominal Frequency | Fn | 12.000000 | MHz | |
| Mode of Oscillation | MO | AT Cut-Fundamental | | |
| Calibration Load Capacitance | CL | 16 | pF | |
| Calibration Tolerance | FL | ±30 | ppm | at 25°C±3°C |
| Operating Temperature Range | TR | -10 to +60 | °C | |
| Frequency Stability (Frequency Deviation over the Operating Temperature Range) | F/T | ±50 | ppm | Reference to the Frequency at 25°C |
| Operating Drive Level | | 100 | µW | |
| Maximum Drive Level | | 500 | µW | |
| Equivalent Series Resistance | ESR | 60 | Ω | Max |
| Shunt Capacitance | C0 | 7 | pF | Max |
| Aging at 25°C | | ±5 | ppm | Max, 1st year |
| Storage Temperature | | -55 to +125 | °C | |
| Insulation Resistance | | 500 | MΩ | Min |

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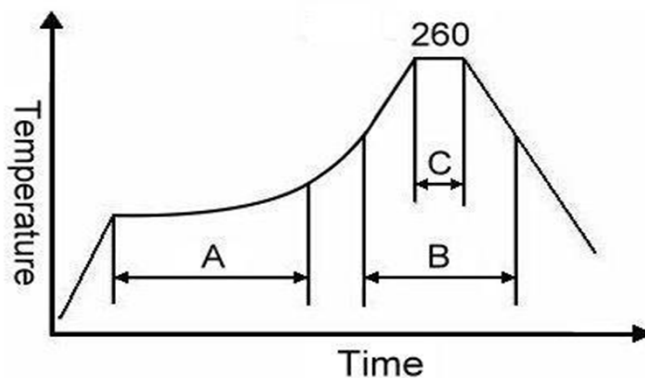
RELIABILITY SPECIFICATIONS

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



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 |

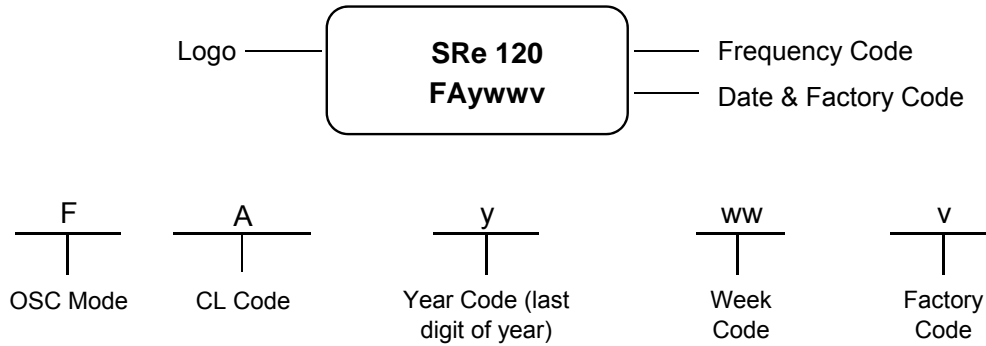
For soldering reflow profile and reliability test ratings go to: <http://www.pericom.com/pdf/sre/reflow.pdf>

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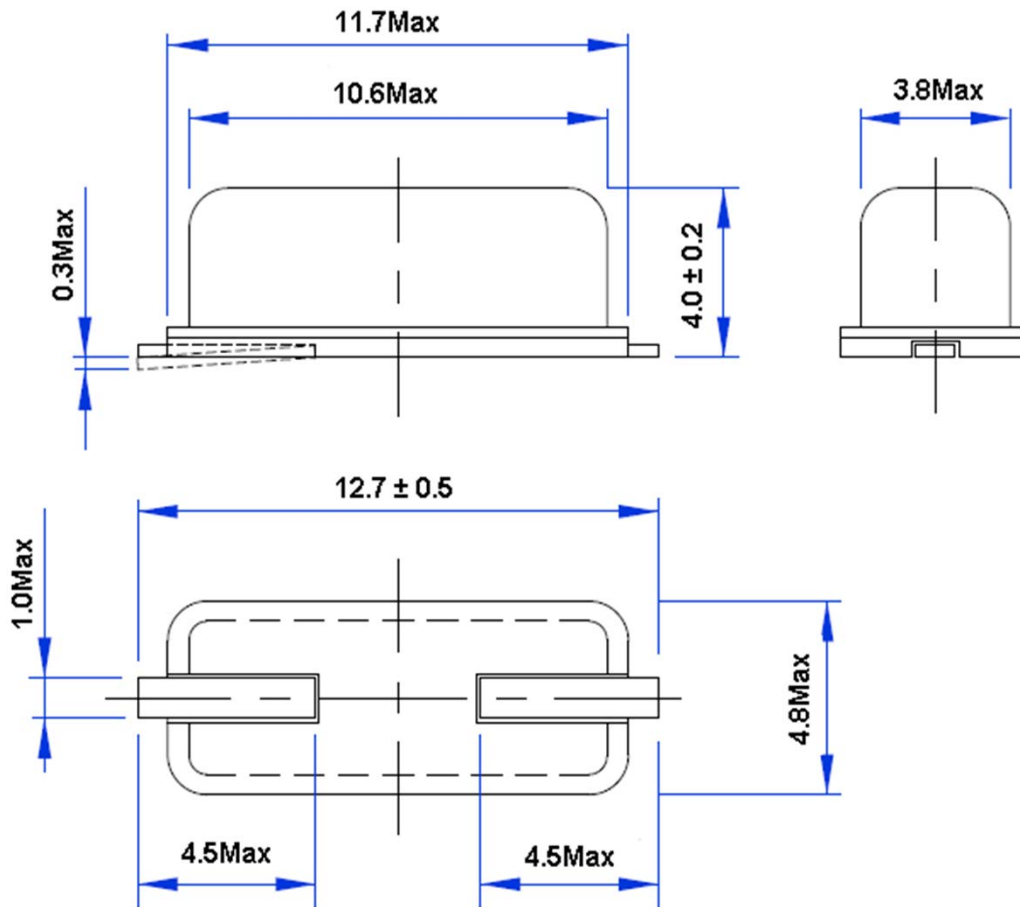
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MARKING



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

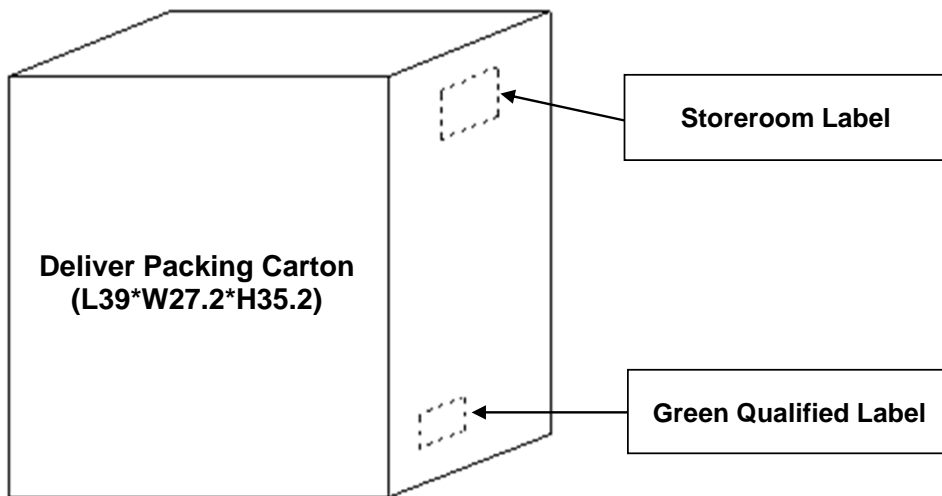
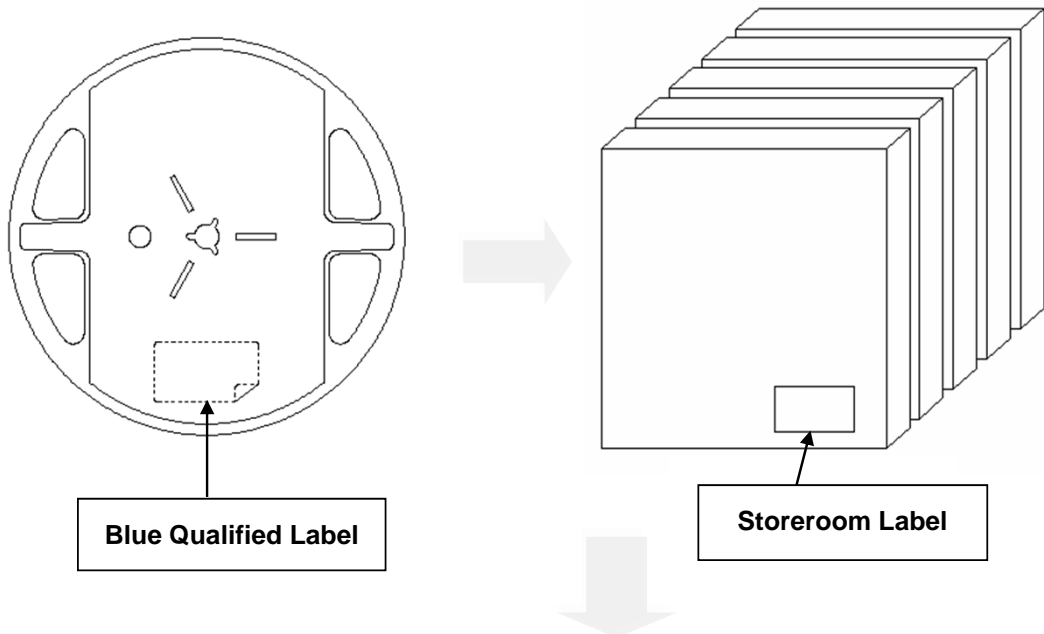
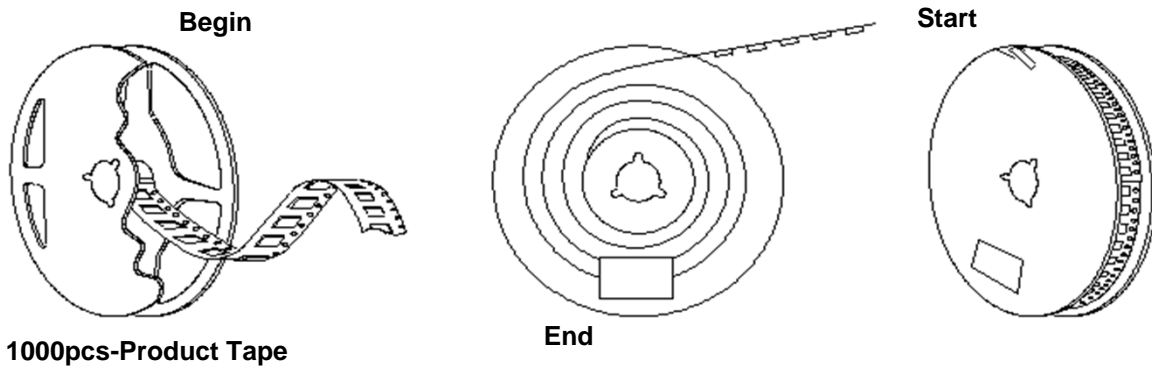


TYPE GC 49S SMD QUARTZ CRYSTAL

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PACKING



Mouser Electronics

Authorized Distributor

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