



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# PSE Technology Corporation

## SPECIFICATION FOR APPROVAL

CUSTOMER \_\_\_\_\_

NOMINAL FREQUENCY \_\_\_\_\_ 16.000000 MHz \_\_\_\_\_




PRODUCT TYPE \_\_\_\_\_ **TYPE GC 49S SMD QUARTZ CRYSTAL** \_\_\_\_\_

SPEC. NO. ( P/N ) \_\_\_\_\_ GC1600058 \_\_\_\_\_

CUSTOMER P/N \_\_\_\_\_

ISSUE DATE \_\_\_\_\_ January 12, 2011 \_\_\_\_\_

VERSION \_\_\_\_\_ A \_\_\_\_\_

| APPROVED  | PREPARED  | QA  |
|---|---|---|
|  |  |  |
| <b>APPROVED BY CUSTOMER :</b>   |   | <b>AVL Status</b>   |
| 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>

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

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

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## GC1600058

VER. A 12-Jan-11

### VERSION HISTORY

| Version No. | Version Date | Customer Receipt Date | Supplier Receipt Date | Description     | Notes |
|-------------|--------------|-----------------------|-----------------------|-----------------|-------|
| A           | Jan.12,2011  |                       |                       | Initial Release |       |
|             |              |                       |                       |                 |       |
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### ELECTRICAL SPECIFICATIONS

| Item   | Symbol | Specifications     | Units | Notes                              |
|--|--------|--------------------|-------|------------------------------------|
| Nominal Frequency  | Fn     | 16.000000          | MHz   |                                    |
| Mode of Oscillation  | MO     | AT Cut-Fundamental |       |                                    |
| Calibration Load Capacitance   | CL     | 18                 | pF    |                                    |
| Calibration Tolerance  | FL     | ±30                | ppm   | at 25°C±3°C                        |
| Operating Temperature Range  | TR     | -40 to +85         | °C    |                                    |
| Frequency Stability<br>(Frequency Deviation over the<br>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    | 40                 | Ω     | Max                                |
| Shunt Capacitance  | C0     | 7                  | 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).

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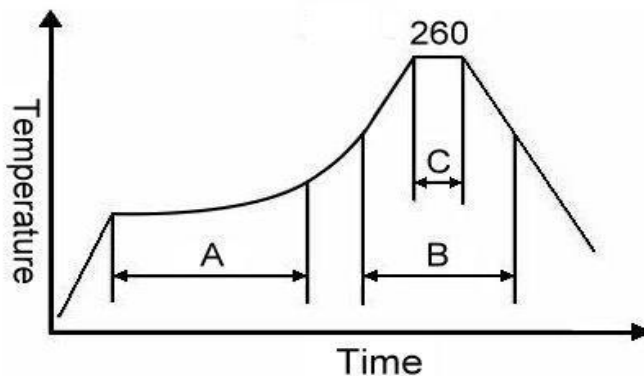
## RELIABILITY SPECIFICATIONS

### 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     |

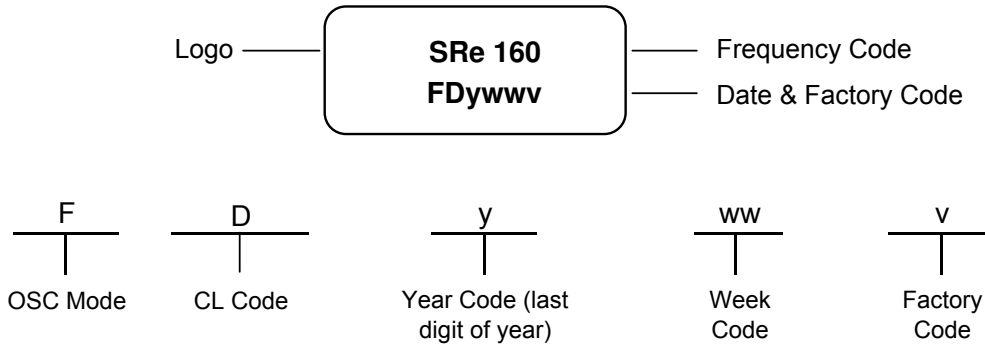
For soldering reflow profile and reliability test ratings go to: <http://www.pericom.com/pdf/sre/reflow.pdf>

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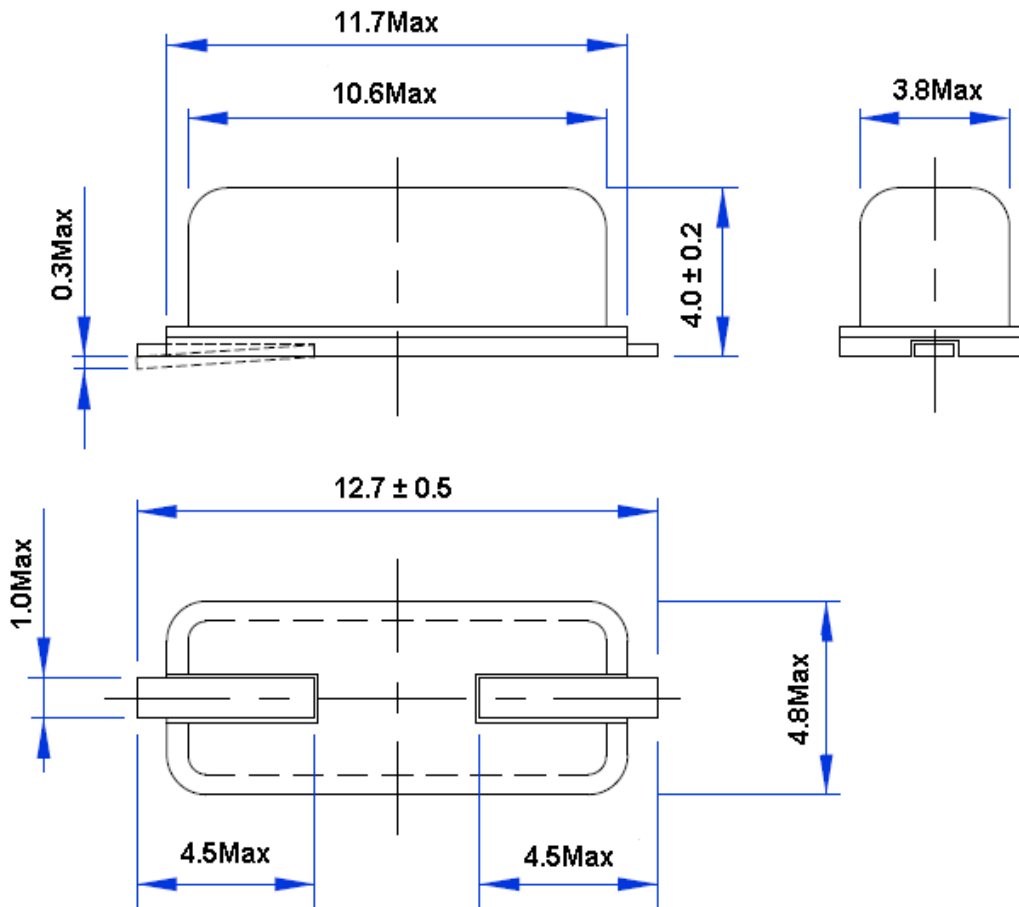
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### MARKING



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



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### PACKING

