

PSE Technology Corporation

SPECIFICATION FOR APPROVAL

CUSTOMER _____

NOMINAL FREQUENCY _____ 20.000000 MHz _____


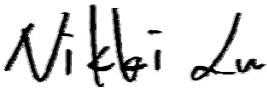

PRODUCT TYPE _____ **TYPE GC 49S SMD QUARTZ CRYSTAL** _____

SPEC. NO. (P/N) _____ GC2000026 _____

CUSTOMER P/N _____

ISSUE DATE _____ May 10, 2011 _____

VERSION _____ C _____

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

PSE Technology Corporation

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*RoHS Compliant
 *HF-Halogen Free
 *REACH Compliant

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

TYPE GC 49S SMD QUARTZ CRYSTAL

GC2000026

VER. C 10-May-11

ELECTRICAL SPECIFICATIONS

Item	Symbol	Specifications	Units	Notes
Nominal Frequency	Fn	20.000000	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	-20 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	30	Ω	Max
Shunt Capacitance	C0	7	pF	Max
Aging at 25°C		±5	ppm	Max, 1st year
MaxRR-MinRR at Drive Level Dependency Sweep	DLD2	10	Ω	
MaxRR at Drive Level Dependency Sweep	RLD2	30	Ω	
MaxFR-MinFR at Drive Level dependency Sweep	FDLD	10	ppm	
Storage Temperature		-55 to +125	°C	
Insulation Resistance		500	MΩ	Min

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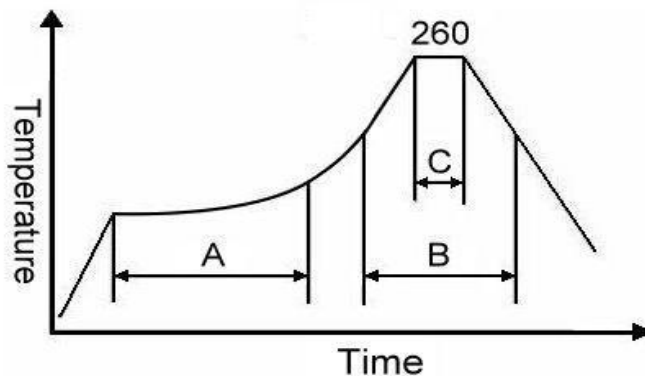
RELIABILITY SPECIFICATIONS

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

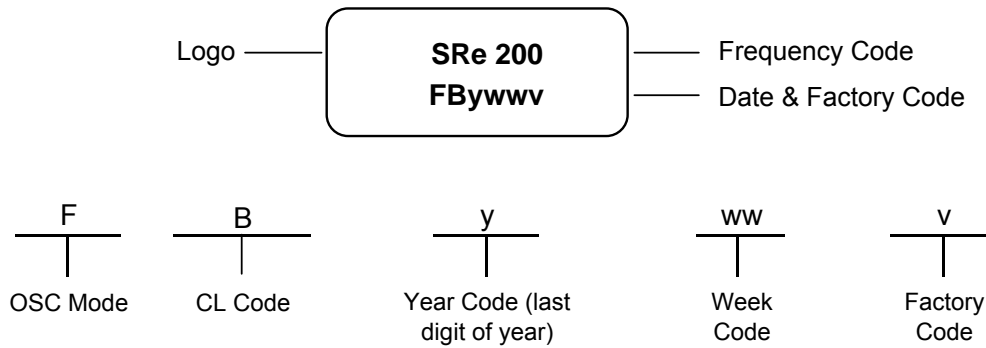
For soldering reflow profile and reliability test ratings go to: <http://www.pericom.com/pdf/sre/reflow.pdf>

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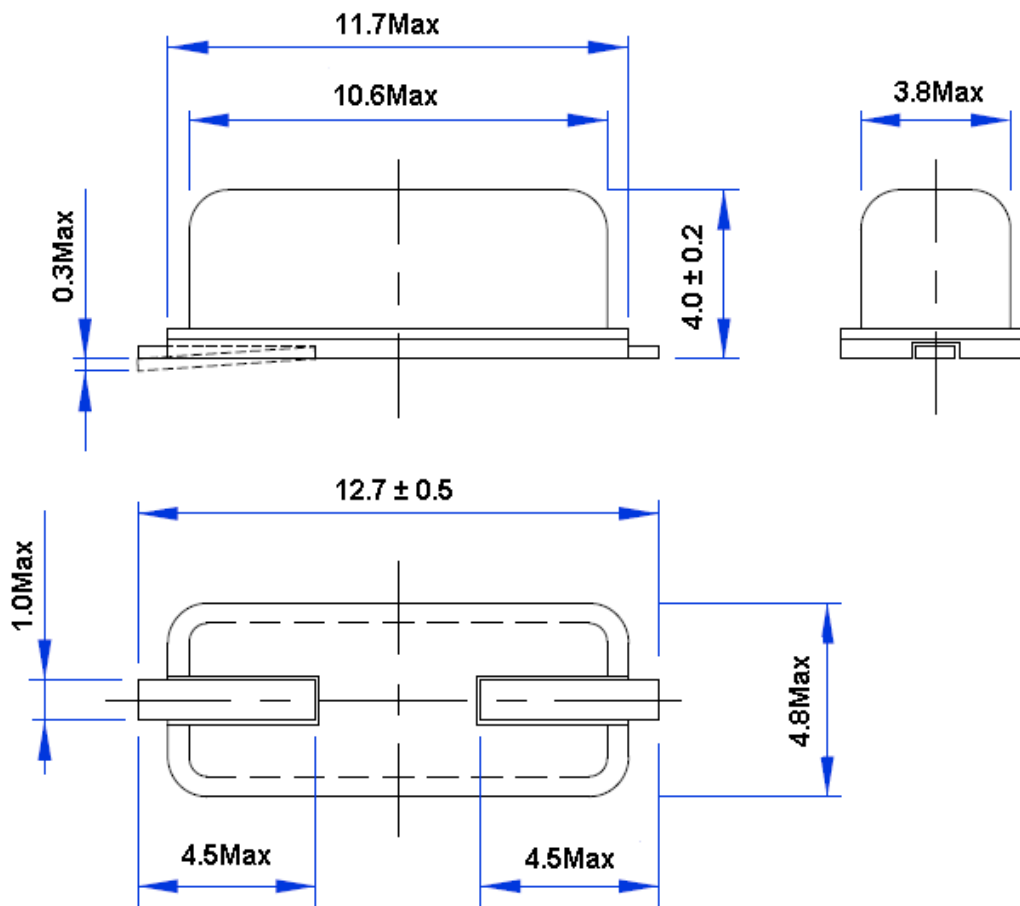
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MARKING



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



TYPE GC 49S SMD QUARTZ CRYSTAL

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PACKING

