

PSE Technology Corporation

SPECIFICATION FOR APPROVAL

CUSTOMER	
NOMINAL FREQUENCY	24.000000 MHz
PRODUCT TYPE	TYPE F9 5.0x3.2 GLASS SEALED CRYSTAL
SPEC. NO. (P/N)	F92400054
CUSTOMER P/N	
ISSUE DATE	August 23, 2013
VERSION	C

APPROVED	PREPARED	QA
Brenda	Viklai Lu	Bedryer
APPROVED BY	CUSTOMER:	AVL Status
Please return one copy v	Please return one copy with approval to PSE-TW	

PSE Technology Corporation

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

*RoHS Exemption

*HF-Halogen Free

*REACH Compliant



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

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VERSION HISTORY

Verision No.	Verision Date	Customer Receipt Date	Supplier Receipt Date	Description	Notes
Α	Feb.25,2009			Initial Release	
В	Nov.12,2010			Revised format & Changed Logo	
С	Aug.23,2013			Updated Suggested IR Reflow Profile & Format & Updated mechanical drawing	

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ELECTRICAL SPECIFICATIONS

Item	Symbol	Specifications	Units	Notes
Nominal Frequency	Fn	24.000000	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	-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		10	μW	
Maximum Drive Level		100	μW	
Equivalent Series Resistance	ESR	60	Ω	Max
Shunt Capacitance	C0	5	pF	Max.
Aging at 25°C		±5	ppm	Max, 1st year
Storage Temperature		-55 to +125	°C	
Insulation Resistance		500	ΜΩ	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

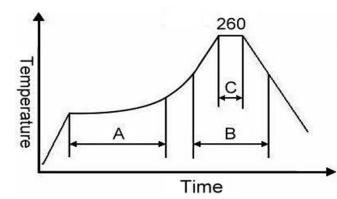
f) VIBRATION: JESD22-B103

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



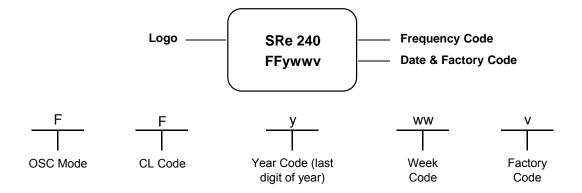
	Stage	Temperature	Time
Α	Preheat	150~200°C	60~120 Sec
В	Primary Heat	217°C	60~150 Sec
С	Peak	260°C	10 Sec

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

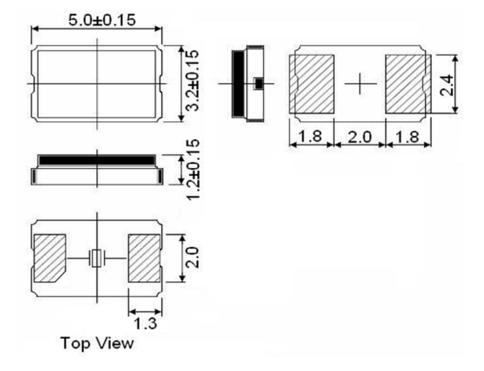
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MARKING



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



Note:

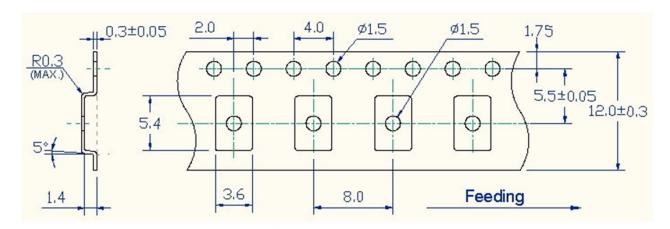
Pin shape is only for reference, and the Pin with chamfer or without chamfer is based on the real product.

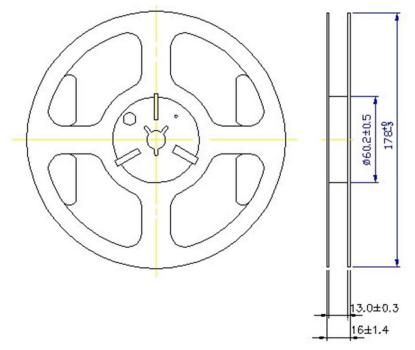


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Tape & Reel





- 1. 230mm minimum leafer 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.

