

Pb-Lead Free RoHS Compliant	Ltr	Revisions	Date	Appr

Electrical Specifications:

Nominal Frequency		32.768			KHz
Temperature Stability		±100			PPM Max
		±50			
		±30			
		±25			
		±20			
Aging per Year		±3			
Operating Temperature Range	Standard	0 to +70			°C
	Extended	-40 to +85			
Storage Temperature Range		-55 to +125			
Supply Voltage		1.8 ± 5%	2.5 ± 5%	3.3 ± 10%	Vdd
Input Current		1.5	2.5	3.5	mA Max
Output Symmetry	Standard	40 to 60			%
	Tight	45 to 55			
Output Level		HCMOS			-
Output Load		15			pF Max
Rise and Fall Time		50	50	50	ns Max
Enable-Disable Function		Tri-State			-

Temperature stability is Inclusive of all conditions:

Calibration Tolerance at +25°C, frequency stability over the operating temperature range, supply voltage, supply voltage change, output load changes, shock, vibration, and 1st year aging at +25°C.



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All dimensions are millimeters.

CAD: TCR

Review: EG

Appr: SL

Page: 1/4 Date: Feb 4, 2008

Specification Title:

Clock Oscillator

Time of Day - 32.678 KHz

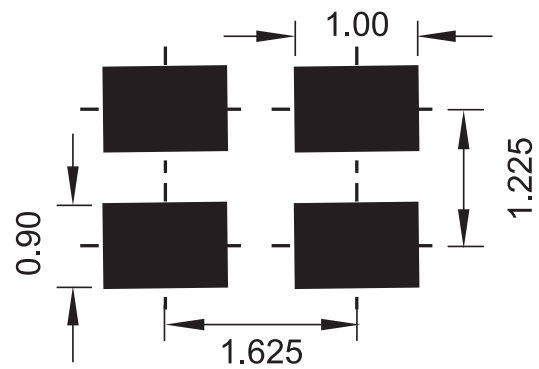
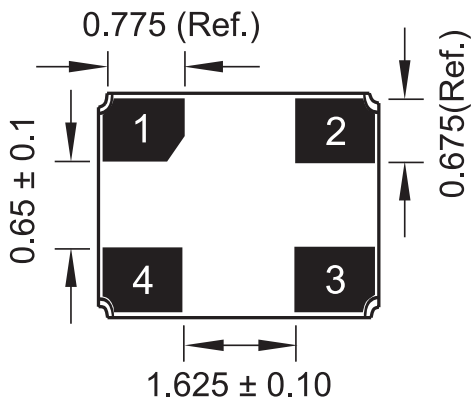
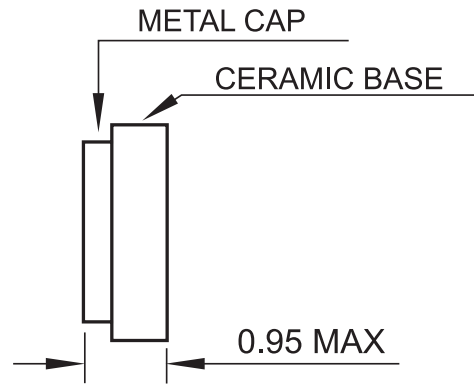
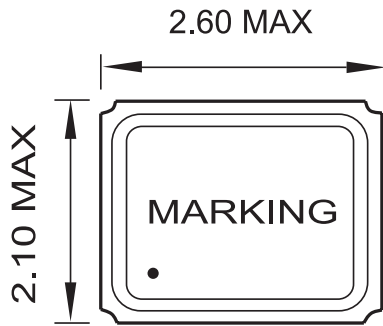
HCMOS Output

2.5 x 2 millimeter Surface Mount

General Product Specification

Part Number: **S2-32.768 KHz Series**

Mechanical Outline:



#1 : E/D #2 : GND
 #4 : VDC #3 : OUTPUT

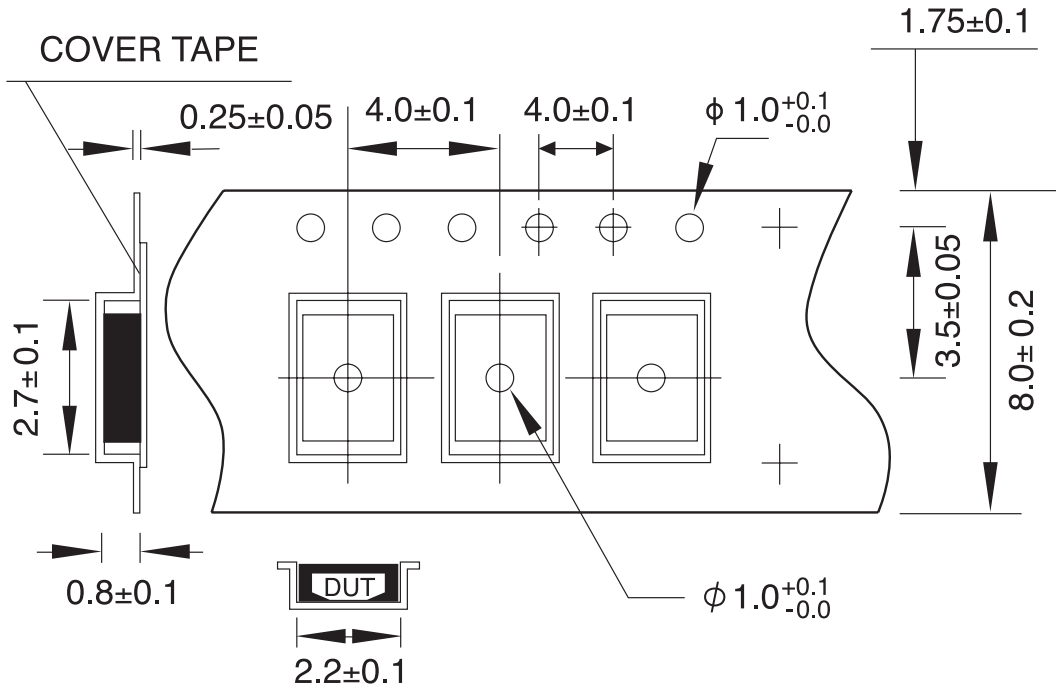
Bottom

Recommended Land Pattern

Pin1	Pin 3
INH	Output
High or Open	Operating
Low	High Impedance

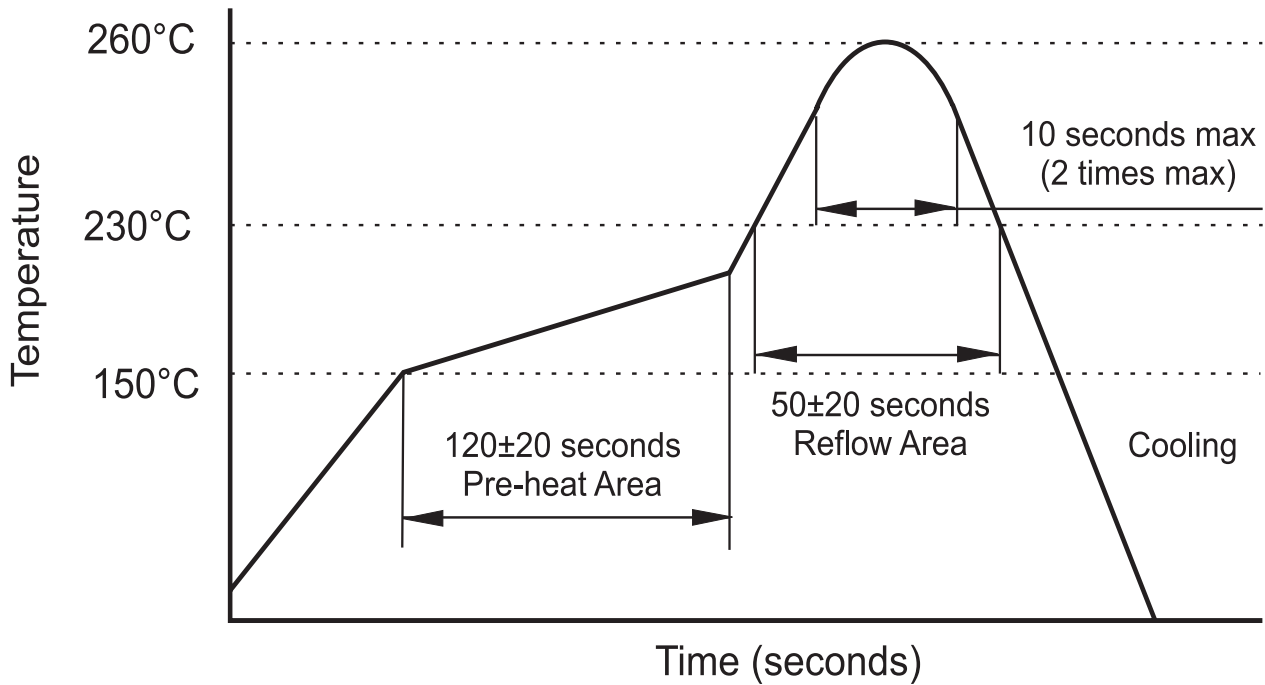
Package is Seam Sealed Ceramic-Metal.
Terminator Pads are Ni/Au
Dimensions are millimeters.

Carrier Tape Dimensions:



Dimensions are millimeters.

Solder Reflow Characteristics:



How to build a Part Number:

Series	S	Parameter
Package	2	2.5 x 2 mm
Supply Voltage	33	+3.3 Vdd ± 10%
	25	+2.5 Vdd ± 5%
	18	+1.8 Vdd ± 5%
Temperature Stability	10	±100 PPM
	05	±50 PPM
	03	±30 PPM
	025	±25 PPM
	020	±20 PPM
Duty Cycle	See Notes	40 / 60 %
	T	45 / 55 %
	-	
Frequency	32.768K	KHz
	-	
Temperature Range	See Notes	0 to +70 °C
	X	-40 to +85 °C
	-	
Output Load	15	pF Max
	-	
Packaging	R	Tape and Reel

Part Number Example:

S23305-32.768K-15-X-R

S2: 2.5 x 2.0 mm SMD Package

33: +3.3 ± 10 % Vdd Supply Voltage

05: ±50 PPM Temperature Stability

32.768 KHz Nominal Frequency

15 pF Load

X: -40 to + 85° C Extended Temperature Range

R: Tape and Reel Packaging

Notes:

1- Standard Duty Cycle and Temperature Range do not need to be included in Part Number description.

2- Product is shipped in Tape and Reel configuration. Each reel contains 1000 pieces.

3- Quantities less than 1000 are shipped bulk in ESD pouches.

4- Specification subject to change without notice.