

**Pb-Lead Free  
RoHS Compliant**

Ltr	Revisions	Date	Appr

**Electrical Specifications:**

<b>Nominal Frequency</b>		<b>32.768</b>	<b>KHz</b>
<b>Temperature Stability</b>		<b>±100</b>	<b>PPM Max</b>
		<b>±50</b>	
		<b>±30</b>	
		<b>±25</b>	
		<b>±20</b>	
<b>Aging per Year</b>		<b>±3</b>	
<b>Operating Temperature Range</b>	<b>Standard</b>	<b>0 to +70</b>	<b>°C</b>
	<b>Extended</b>	<b>-40 to +85</b>	
<b>Storage Temperature Range</b>		<b>-55 to +125</b>	
<b>Supply Voltage</b>		<b>3.3 ± 10%</b>	<b>Vdd</b>
<b>Output Voltage</b>	<b>Logic High (Voh)</b>	<b>90%</b>	<b>Vdd Min</b>
	<b>Logic Low (Vol)</b>	<b>10%</b>	<b>Vdd Max</b>
<b>Output Symmetry</b>	<b>Standard</b>	<b>40 to 60</b>	<b>%</b>
	<b>Tight</b>	<b>45 to 55</b>	
<b>Output Level</b>		<b>HCMOS</b>	<b>-</b>
<b>Output Load</b>		<b>15</b>	<b>pF Max</b>
<b>Rise and Fall Time</b>		<b>200</b>	<b>ns Max</b>
<b>Enable-Disable Function</b>		<b>Tri-State</b>	<b>-</b>

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: Nov 27, 2007

Specification Title:

**Clock Oscillator**

**Time of Day - 32.678 KHz**

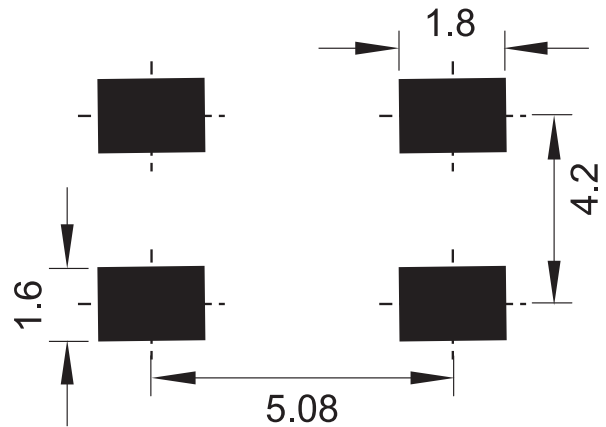
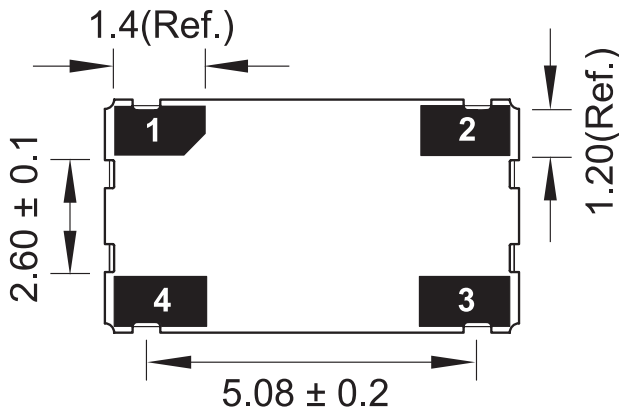
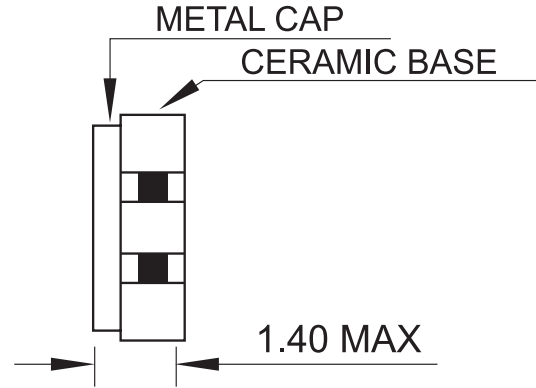
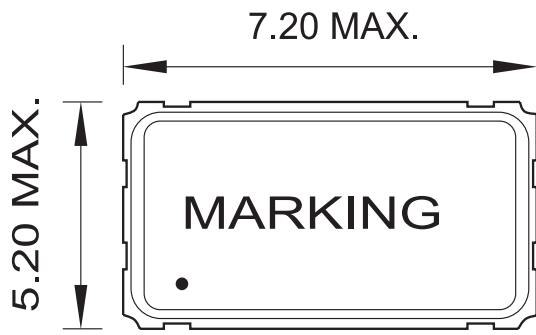
**HCMOS - 3.3 V**

**5 x 7 millimeter Surface Mount**

**General Product Specification**

Part Number: **S7-32.768 KHz Series**

**Mechanical Outline:**



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

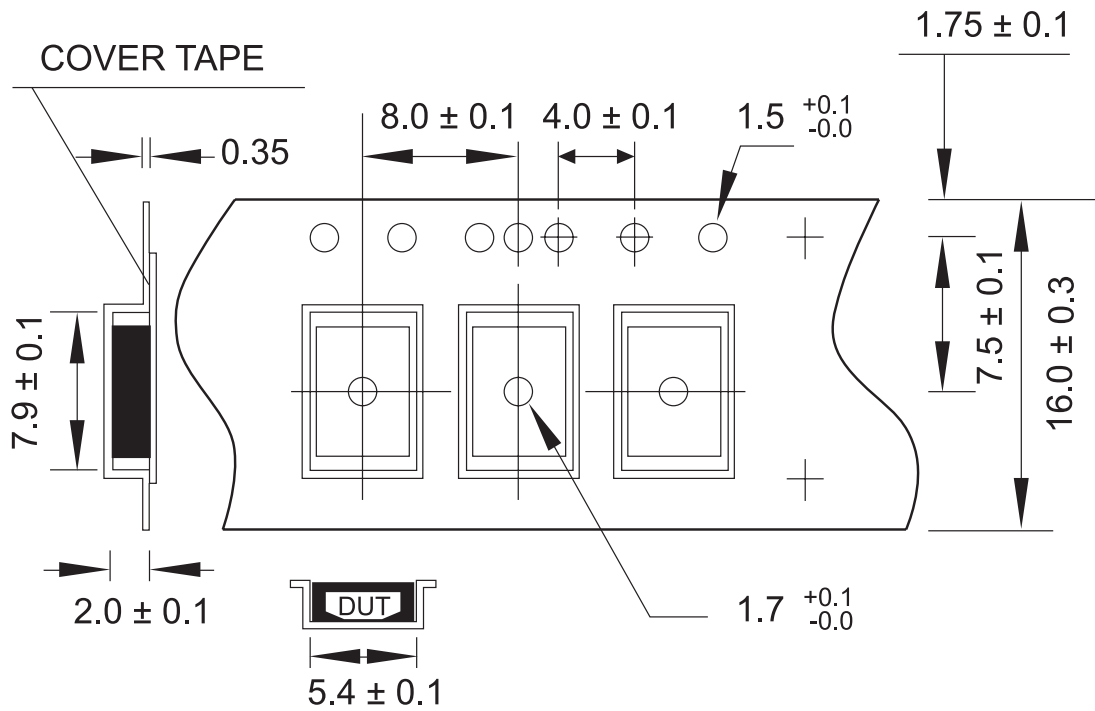
Bottom

Recommended Land Pattern

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

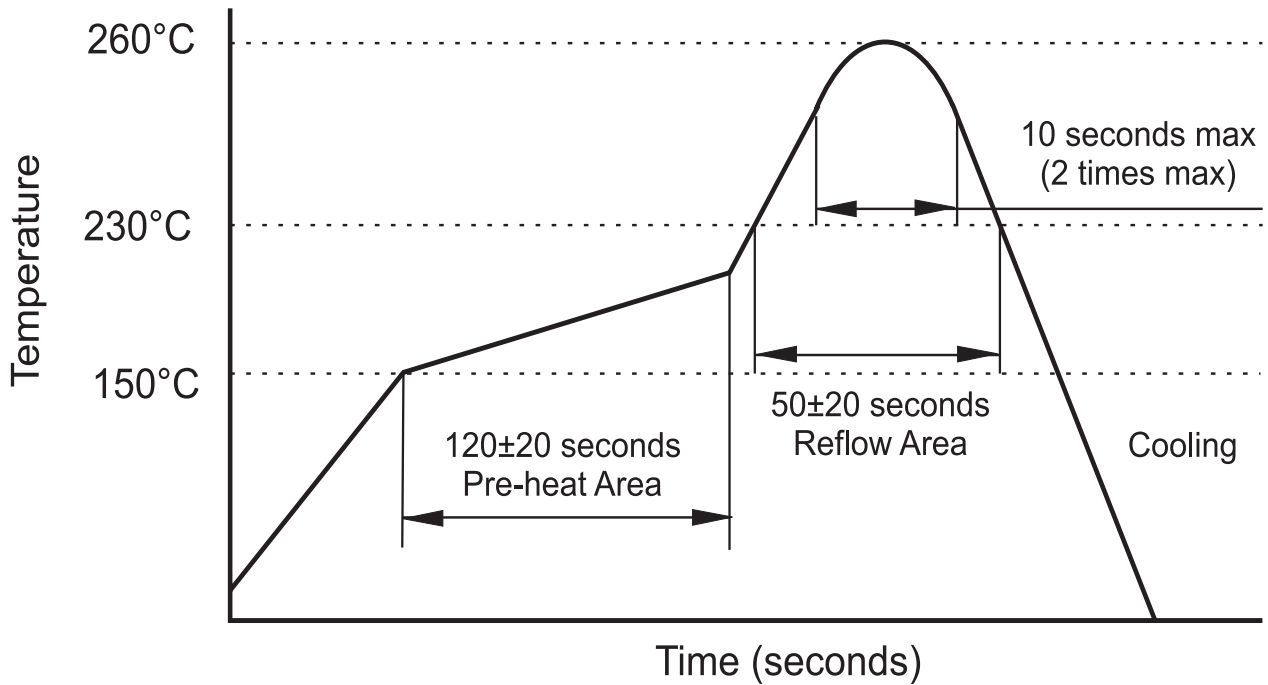
**Package is Seam Sealed Ceramic-Metal.  
Terminator Pads are Ni/Au  
Dimensions are millimeters.**

**Carrier Tape Dimensions:**



**Dimensions are millimeters.**

**Solder Reflow Characteristics:**



## How to build a Part Number:

Series	S	Parameter
Package	7	5.0 x 7.0 mm
Supply Voltage	33	+3.3 Vdd ± 10%
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:

**S73310-32.768K-15-X-R**

**S7: 5.0 x 7.0 mm SMD Package**

**33: +3.3 ± 5% Vdd Supply Voltage**

**10: ±100 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.