

**RoHS Compliant  
Pb - Lead Free**

Ltr	Revisions	Date	Appr

**Electrical Specifications:**

Frequency Range		13.500 - 156.250		MHz
Frequency Stability over Temperature		±100		PPM Max
		±50		
		±25		
Aging per Year		±3		
Operating Temperature Range	Standard	-10 to +70		°C
	Extended	-40 to +85		
Storage Temperature Range		-55 to +125		
Supply Voltage		2.5 ± 5%	3.3 ± 5%	Vdd
Input Current	13.500-156.250	40		mA Max
Output Voltage	Logic High (Voh)	0.9		Vdd Min
	Logic Low (Vol)	-0.15		Vdd Max
Output Symmetry		45 to 55		%
Output Type		HCSL - Complementary Output		-
Output Load		50		Ω
Input Enable Voltage		1.75	2.31	V(Min)
Input Disable Voltage		0.75	0.99	V(Max)
Rise and Fall Time	13.500-99.999Mhz	1	1	ns Max
	100.000 - 156.250Mhz	0.7	0.7	
Phase Jitter (12 KHz to 20 MHz)		1		ps RMS

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: JL

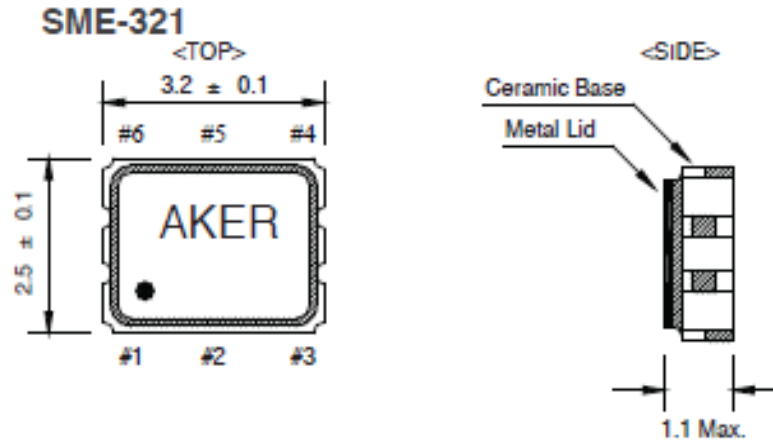
Page: 1/4 Date: June 29, 2016

Specification Title:

**Clock Oscillator  
 HCSL - Complimentary Output  
 3.2 x 2.5 millimeter Surface Mount - 6 Pad  
 General Product Specification**

Part Number: **S3A Series**

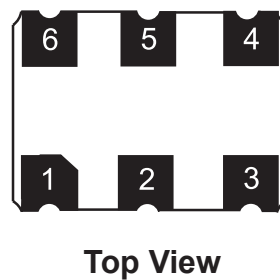
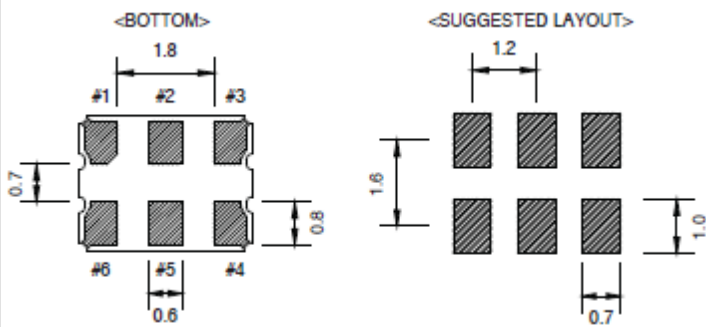
**Mechanical Outline:**



**Package is Seam Sealed Ceramic-Metal.  
 Dimensions are millimeters.**

**PCB Solder Pad Layout:**

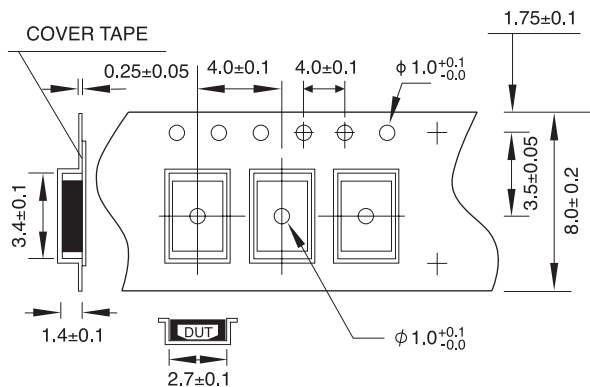
**Pad Connection:**



**Pin Connection**

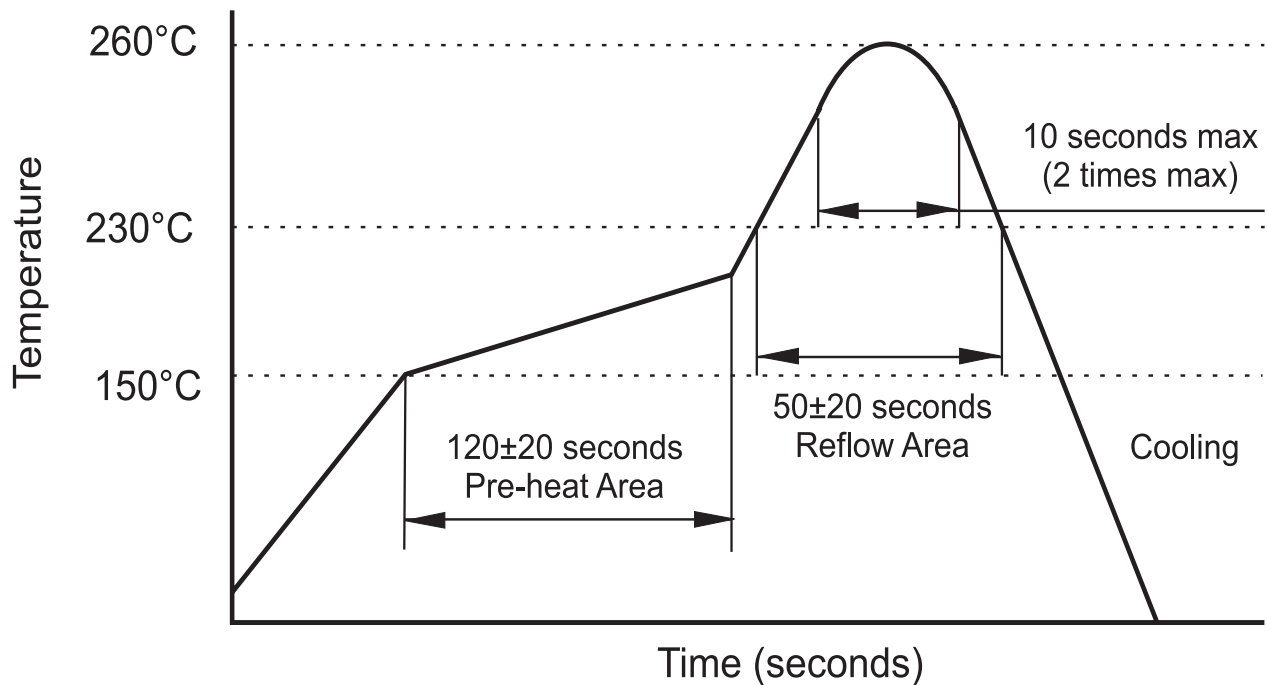
- 1- INH
- 2- NC
- 3- GND
- 4- Output - Q
- 5- Comp. Output - QN
- 6- Vdd

### Carrier Tape Dimensions:



Dimensions are millimeters.

### Solder Reflow Characteristics:



## How to build a Part Number:

Series	S	Parameter
Package	3A	3.2 x 2.5 mm - 6 Pad
Supply Voltage	25	+2.5 Vdd ± 5%
	33	+3.3 Vdd ± 5%
Temperature Stability	10	±100 PPM
	05	±50 PPM
	025	±25 PPM
Frequency	13.500 - 156.250	MHz
Output Load	H	HCSL
Temperature Range	See Notes	0 to +70 °C
	X	-40 to +85 °C
Packaging	R	Tape and Reel

### Part Number Example:

**S3A3310-155.520-H-X-R**

**S3A: 3.2 x 2.5 mm SMD Package - 6 Pad**

**33: +3.3 Vdd Supply Voltage**

**10: ±100 PPM Temperature Stability**

**155.520 MHz Nominal Frequency**

**H: HCSL - Complimentary Output**

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

**R: Tape and Reel**

### Notes:

- 1- Standard Temperature Range does 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.