

**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 Mhz	50	50	mA Max
Output Voltage	Logic High (Voh)	1.6	1.6	Vdd Min
	Logic Low (Vol)	0.9	0.9	Vdd Max
Differential Output Voltage (Vod)		247 (Min) 330 (Typ) 454 (Max)		mV
Offset Voltage (Vos)		1.125 (Min) 1.250 (Typ) 1.375 (Max)		V
Output Symmetry		45 to 55		%
Output Type		LVDS - Complimentary Output		-
Output Load (Between Q and QN)		100		Ω
Rise and Fall Time	13.500 - 99.999Mhz	1	1	ns Max
	100.000 - 156.250Mhz	0.5	0.5	
Enable-Disable Function		Tri-State		-
		INH - Pin 1	Q Pin 4 - QN Pin 5	-
		High - Pin 1	Operating	-
		Low - Pin 1	High Impedance	-
Enable High Input Voltage		1.75	2.31	Vdd Min
Enable Low Input Voltage		0.75	0.99	Vdd Max
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.



Accurate Kinetic Energy

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All dimensions are millimeters.

CAD: TCR

Review: EG

Appr: JL

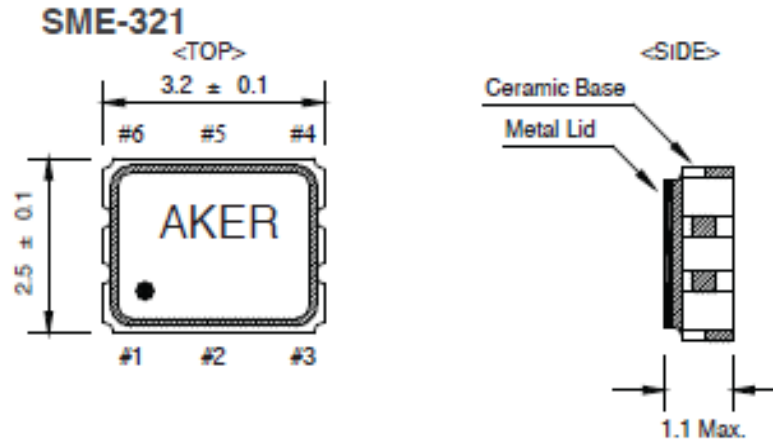
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Specification Title:

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

Part Number: **S3A Series**

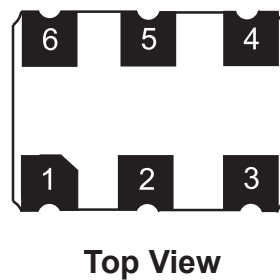
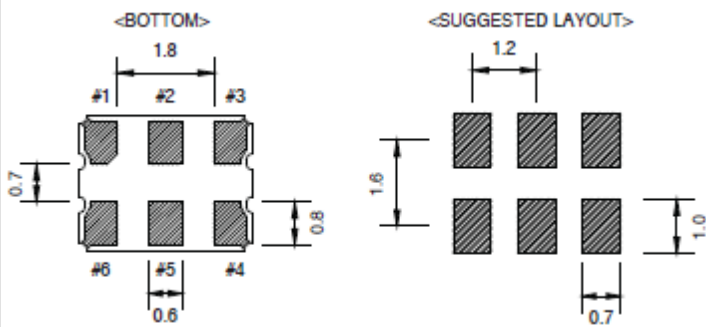
Mechanical Outline:



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

PCB Solder Pad Layout:

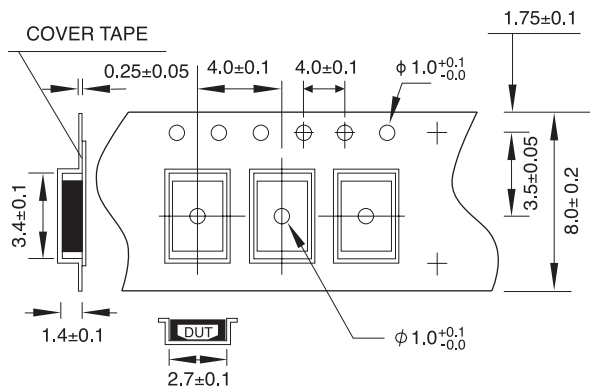
Pad Connection:



Pin Connection

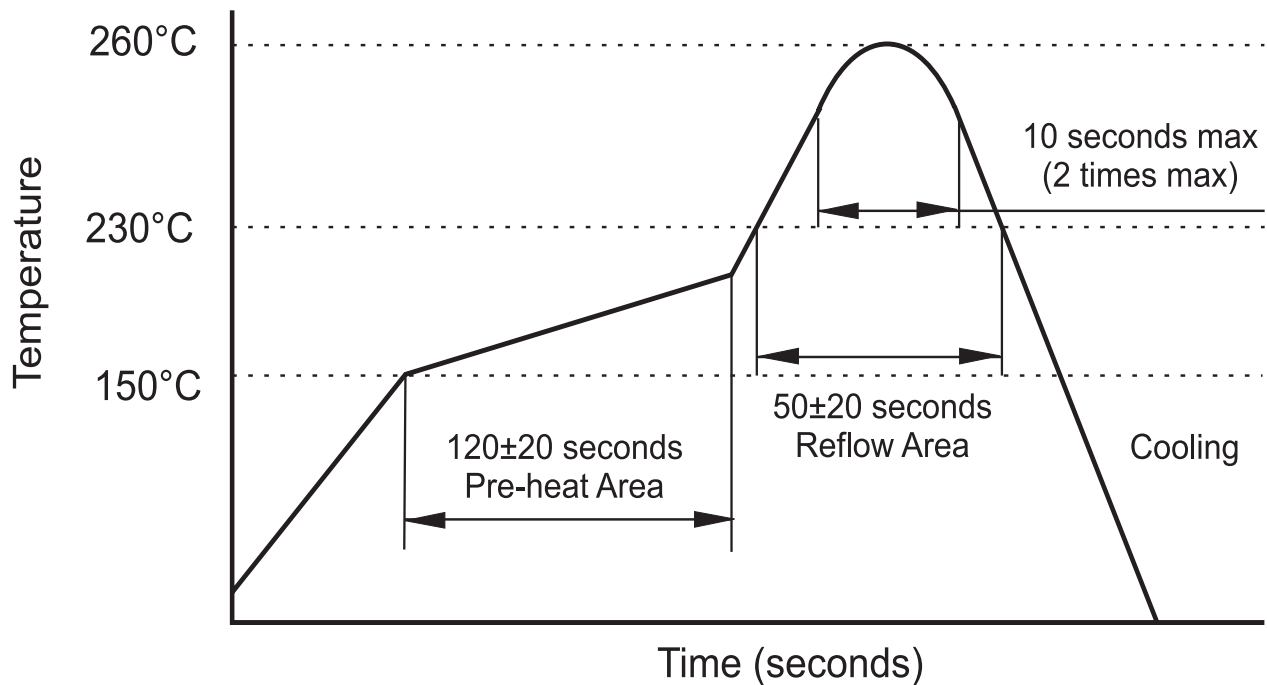
- 1- INH
- 2- NC
- 3- GND
- 4- Output - Q
- 5- Comp. Output - QN
- 6- Vdd

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	L	LVDS
Temperature Range	See Notes	0 to +70 °C
	X	-40 to +85 °C
Packaging	R	Tape and Reel

Part Number Example:

S3A3310-155.520-L-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

L: LVDS - 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.