



Accurate Kinetic Energy

No.11-3 Jianguo Rd., Tanzi Dist., 42760 Taiwan

All dimensions are millimeters.

CAD: TCR

Review: EG

Appr: JL

Page: 1/4 Date: August 01,2022

Specification Title:

**Clock Oscillator  
LVPECL - Complimentary Output  
3.2 x 2.5 millimeter Surface Mount  
General Product Specification**

Part Number:

**S3A LVPECL Series**

**Electrical Specifications:**

Frequency Range		13.500 ~ 156.25		MHz
Frequency Stability		±25 ~ ±100		ppm
Aging per Year		±3		ppm Max.
Operating Temperature Range	Standard	-20 ~ +70		°C
	Option	-40 ~ +85		
	Option	-40 ~ +105		
	Option	-40 ~ +125		
Storage Temperature Range		-55 ~ +125		
Supply Voltage		2.5 ± 5%	3.3 ± 5%	VDD
Input Current		70	70	mA Max.
Output Voltage	Logic High (Voh)	1.475	2.275	VDD Min.
	Logic Low (Vol)	1.095	1.680	VDD Max.
Output Symmetry (Duty Cycle)		45 ~ 55		%
Output Type		LVPECL		
Output Load ( Connect to VDD - 2V )		50		ohm
Rise and Fall Time	13.500 to 99.999MHz	1.0	1.0	ns Max.
	100.000 to 200.000MHz	0.5	0.5	
Enable-Disable Function		Tri-State		
Input Enable Voltage		1.75	2.31	VDD Min.
Input Disable Voltage		0.75	0.99	VDD Max.
Phase Jitter (12 KHz to 20 MHz)		1		ps Max. RMS

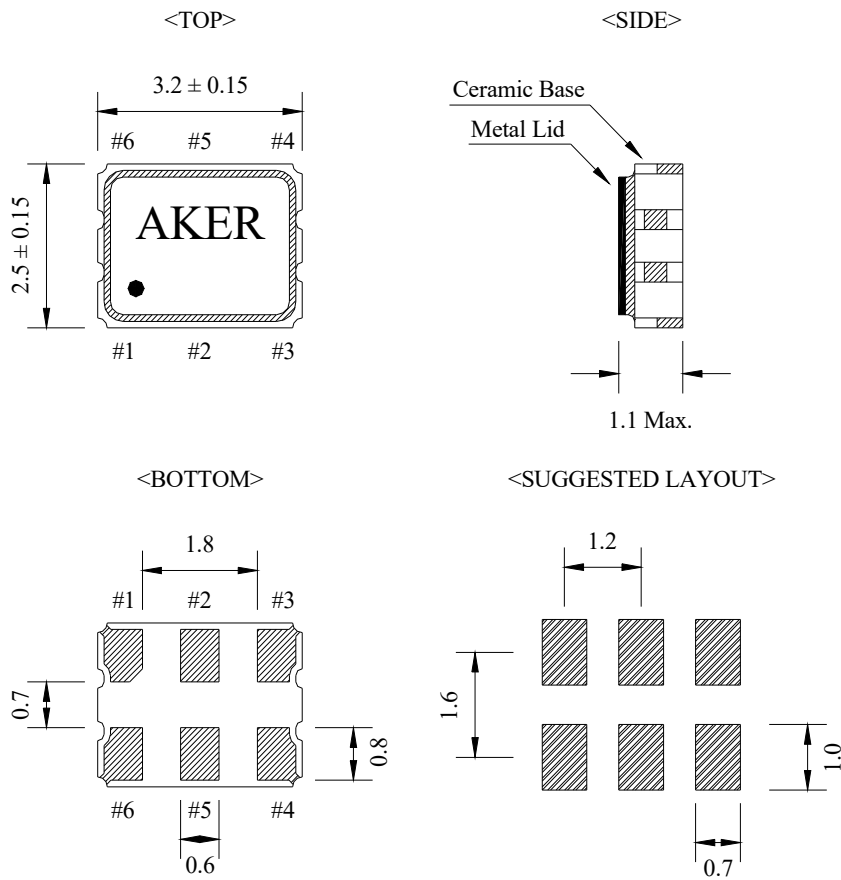
Temperature stability is Inclusive of all conditions:

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

**RoHS Compliant  
Pb - Lead Free**

Ltr	Revisions	Date	Appr

## Mechanical Outline and Solder Pad Layout:

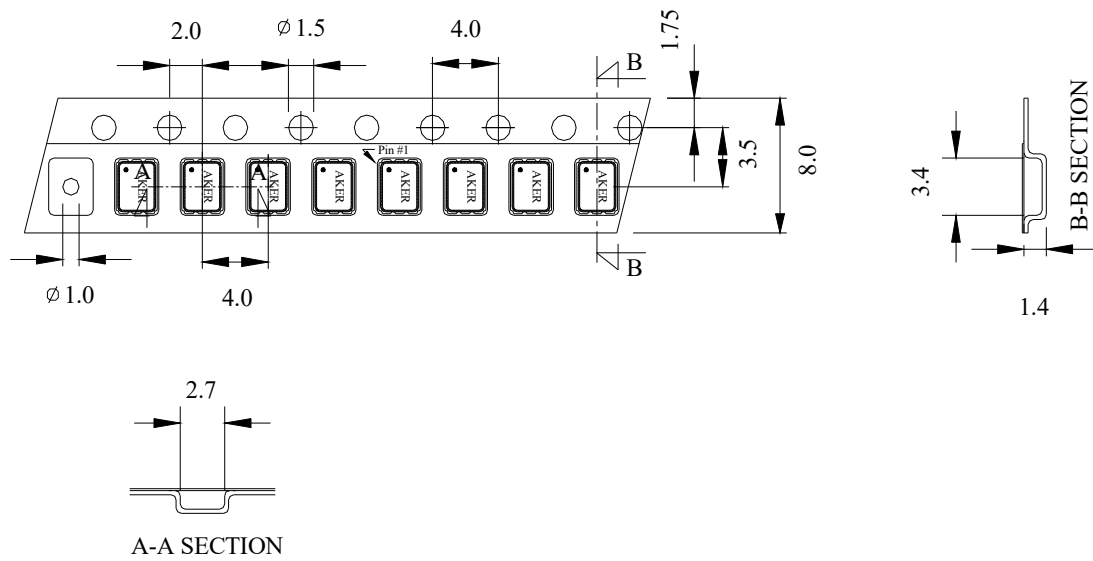


Pin Connection	
PIN No.	Connection
#1	Enable/Disable
#2	NC
#3	GND
#4	Output - Q
#5	Output - QN
#6	VDD

Enable/Disable Function	
PIN #1	PIN #4 & #5
HIGH or OPEN	Operating
LOW	High Impedance

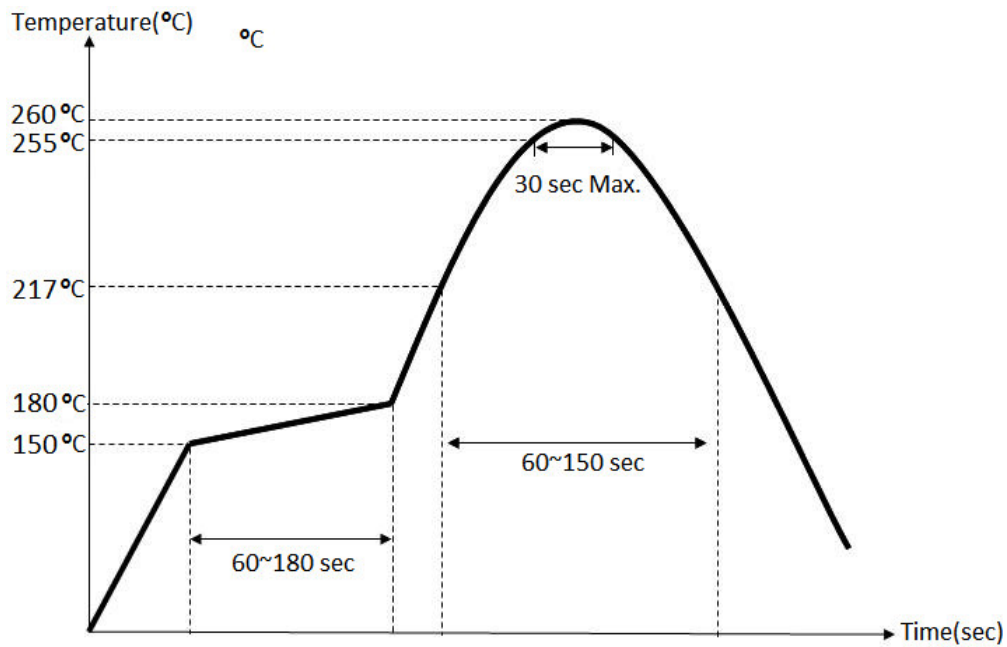
**Package is Seam Sealed Ceramic-Metal.**  
**Terminator Pads are Ni/Au.**  
**Dimensions are millimeters.**

### Carrier Tape Dimensions:



Dimensions are millimeters.

### Solder Reflow Characteristics:



### How to build a Part Number:

Series	S	Parameter
Package	3A	3.2 x 2.5 mm - 6 Pad
Supply Voltage	33	+3.3 VDD ± 5%
	25	+2.5 VDD ± 5%
Temperature Stability	10	±100 ppm
	05	±50 ppm
	025	±25 ppm
Frequency	13.500~156.250	MHz
Output Load	P	LVPECL
Temperature Range	See Notes	-20 ~ +70 °C
	X	-40 ~ +85 °C
	X1	-40 ~ +125 °C
	X2	-40 ~ +105 °C
Packaging	M	250pcs Reel
	R	1000pcs Reel

### Part Number Example:

S3A3305-156.250-P-X-R

S3A: 3.2 x 2.5 mm SMD Package - 6 Pad

33: +3.3±5% VDD Supply Voltage

05: ±50 ppm Temperature Stability

156.250 MHz Nominal Frequency

P: LVPECL Output

X: -40 ~ + 85°C Temperature Range

R: Tape and Reel Packaging - 1000pcs Reel

### 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.
- 3- Quantities less than 250pcs are shipped in tape only.
- 4- Specification subject to change without notice.