

RoHS Compliant Pb - Lead Free	Ltr	Revisions	Date	Appr

Electrical Specifications:

Frequency Range		13.500 - 160.000		MHz
Frequency Stability over Temperature		±100		PPM Max
		±50		
		±25		
Aging per Year		±3		
Operating Temperature Range	Standard	-20 to +70		°C
	Extended	-40 to +85		
	Automotive	-40 to +125		
Storage Temperature Range		-55 to +125		
Supply Voltage		2.5 ± 5%	3.3 ± 5%	Vdd
Input Current	13.500 - 160.000Mhz	70	70	mA Max
Output Voltage	Logic High (Voh)	1.475	2.275	Vdd Min
	Logic Low (Vol)	1.095	1.68	Vdd Max
Output Symmetry		45 to 55		%
Output Type		LVPECL - Complimentary Output		-
Output Load		50		Ω
Rise and Fall Time	13.500 - 99.999Mhz	1	1	ns Max
	100.000 - 160.000Mhz	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.



11-3 Chien-Kuo Rd T.E.P.Z. 4027 Taiwan, ROC

All dimensions are millimeters.

CAD: TCR

Review: EG

Appr: MK

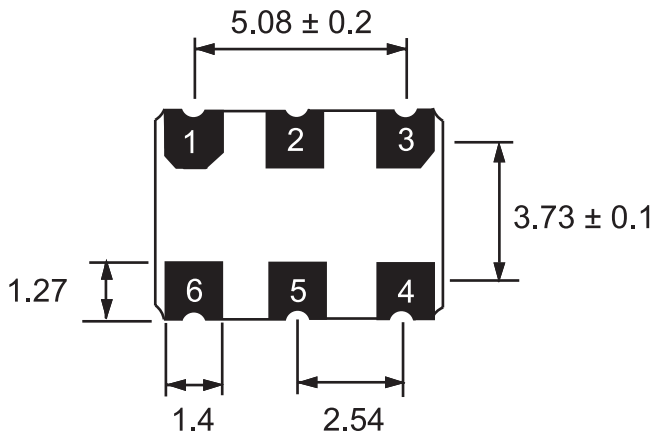
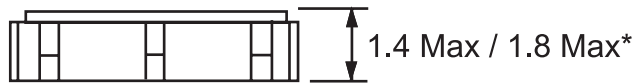
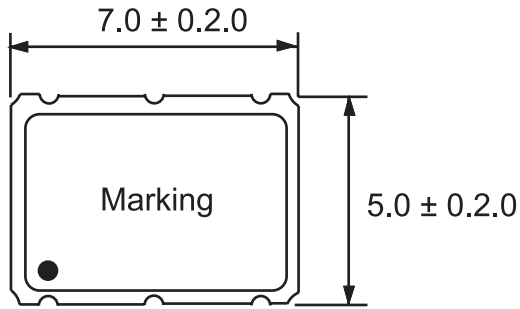
Page: 1/4 Date: Sept 6, 2014

Specification Title:

**Clock Oscillator
LVPECL - Complimentary Output
5.0 x 7.0 mm Surface Mount - 6 Pad
General Product Specification**

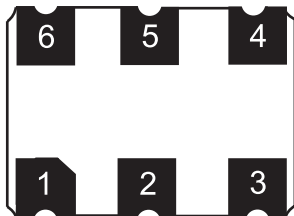
Part Number: **S7A LVPECL Series**

Mechanical Outline:



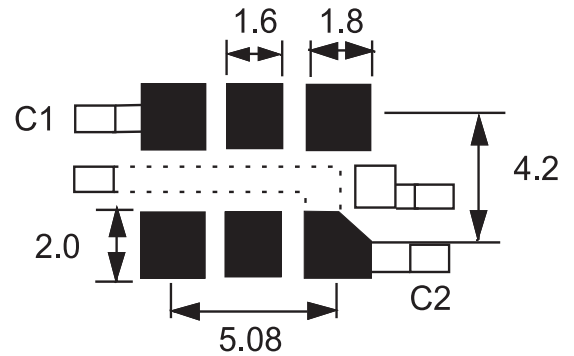
**Package is Seam Sealed Ceramic-Metal.
Dimensions are millimeters.**

Pad Connection:



Top View

Solder Pattern:



C1: 0.01 uF or 0.1 uF decoupling capacitor is recommended.

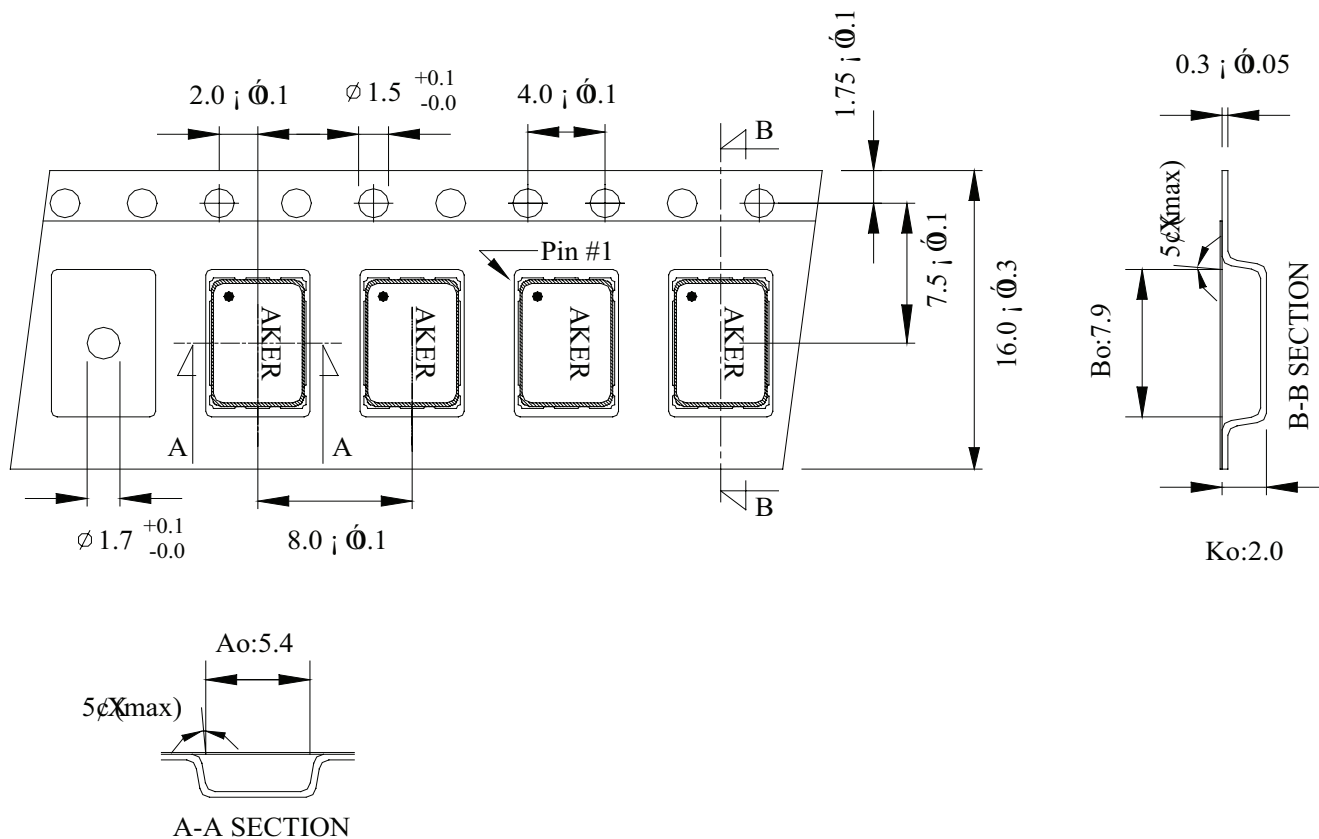
C2: By-Pass capacitor for noise suppression. Contact Aker for suggested values.

*Package Height:
1.4 mm Max for 13.500 to 160.000 MHz

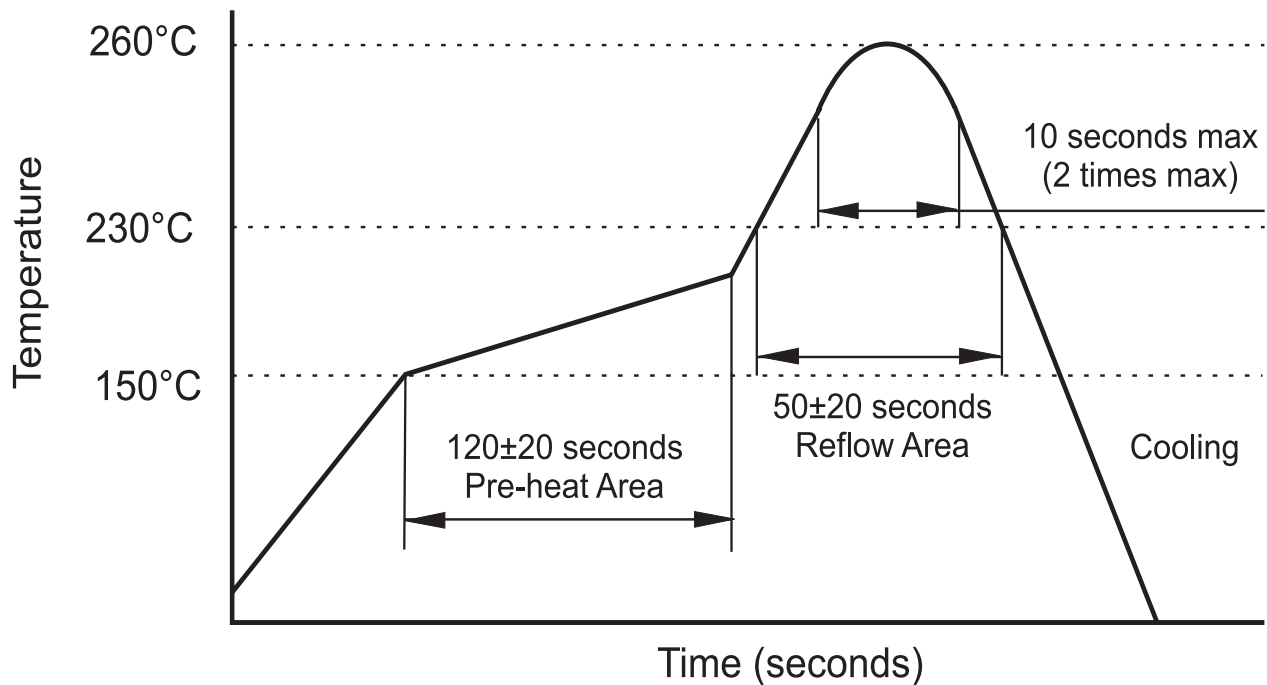
Pin Connection

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

Carrier Tape Dimensions:



Solder Reflow Characteristics:



How to build a Part Number:

Series	S	Parameter
Package	7A	7.0 x 5.0 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 - 160.000	MHz
Output Load	P	LVPECL
Temperature Range	See Notes	-20 to +70 °C
	X	-40 to +85 °C
	X1	-40 to +125 °C
Packaging	M	250pcs Ree1
	R	1000pcs Reel

Part Number Example:

S7A3305-156.250-P-X-R

S7A: 5.0 x 7.0 mm SMD Package - 6 Pad

33: +3.3 Vdd Supply Voltage

05: ±50 PPM Temperature Stability

156.250 MHz Nominal Frequency

P: LVPECL Output

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

R: Tape and Reel Packaging - 1000pcs Reel

Notes:

1- Standard Temperature Range does not need to be included in Part Number description.

*25PPM not available in X1 temp range

2- Product is shipped in Tape and Reel configuration.

3- Quantities less than 250pcs are shipped in tape.

4- Specification subject to change without notice.