

RoHS Compliant Pb - Lead Free	Ltr	Revisions	Date	Appr

Electrical Specifications:

Frequency Range		10.000 to 625.000		MHz
Frequency Stability over Temperature		±100		PPM Max
		±50		
		±25		
Aging per Year		±3		
Operating Temperature Range	Standard	0 to +70		°C
	Extended	-40 to +85		
Storage Temperature Range		-55 to +125		
Supply Voltage		2.5 ± 5%	3.3 ± 5%	Vdd
Input Current	10.000 to 29.900 MHz	60	60	mA Max
	30.000 to 59.900 MHz	65	65	
	60.000 to 99.900 MHz	65	65	
	100.000 to 159.000 MHz	65	65	
	160.000 to 625.000 MHz	100	110	
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	10.000 to 29.900 MHz	2	2	ns Max
	30.000 to 59.900 MHz	1.5	1.5	
	60.000 to 99.900 MHz	1	1	
	100.000 to 159.000 MHz	0.5	0.5	
	160.000 to 625.000 MHz	1.5	1.5	
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 10 MHz)	10.000 to 159.900 MHz	1		ps RMS
	160.000 to 625.000 MHz	4		

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: MK

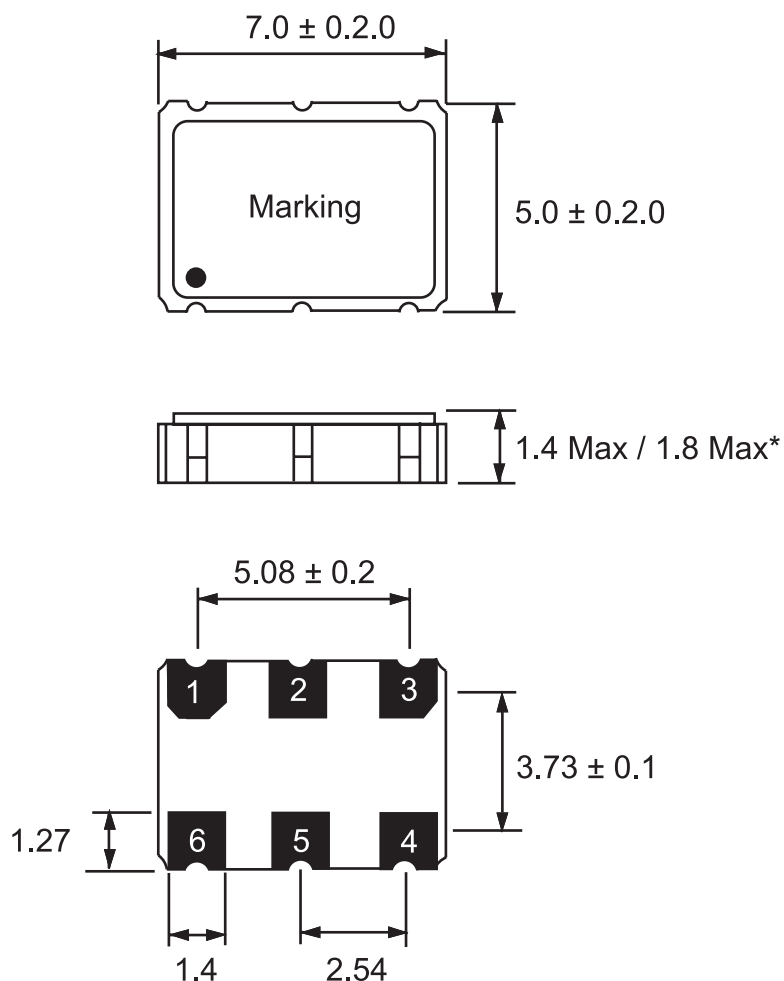
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Specification Title:

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

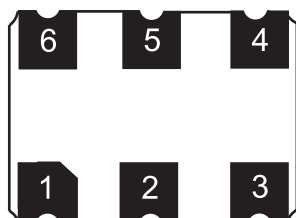
Part Number: **S7A Series**

Mechanical Outline:



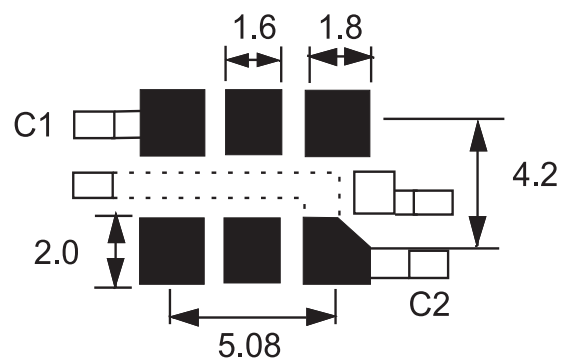
Package is Seam Sealed Ceramic-Metal.
Dimensions are millimeters.

Pad Connection:



Top View

Solder Pattern:



C1: 0.01 μ F or 0.1 μ F decoupling capacitor is recommended.

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

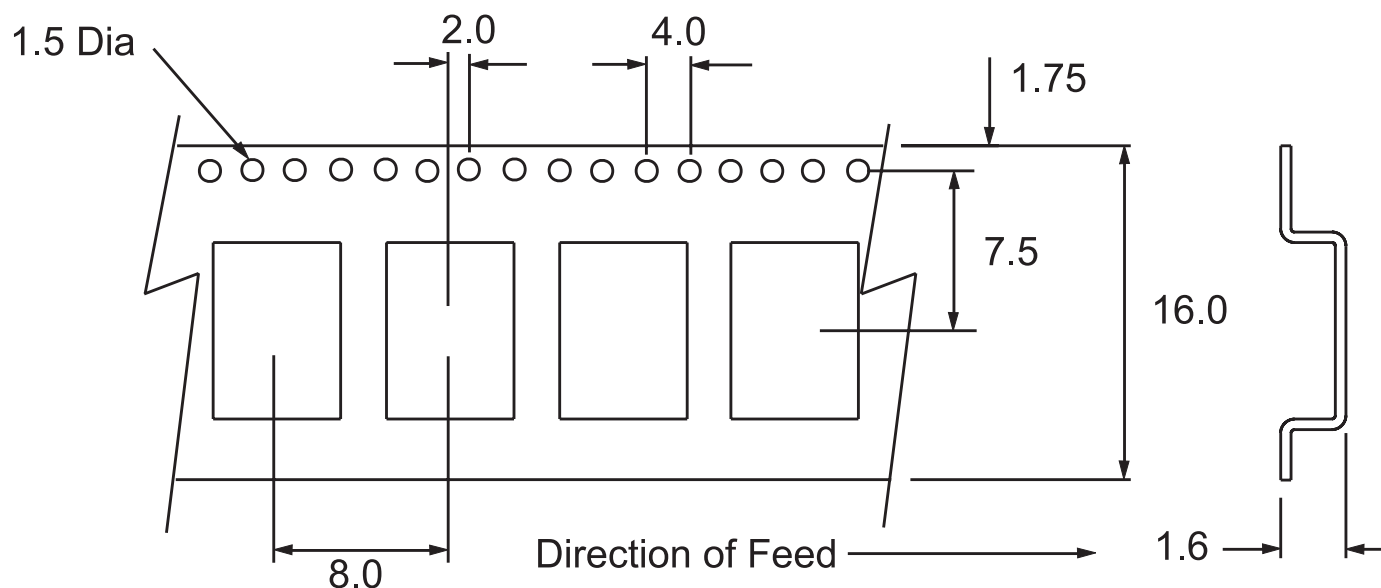
*Package Height:

1.4 mm Max for 10 to 159.900 MHz
 1.8 mm Max for 160 to 625 MHz

Pin Connection

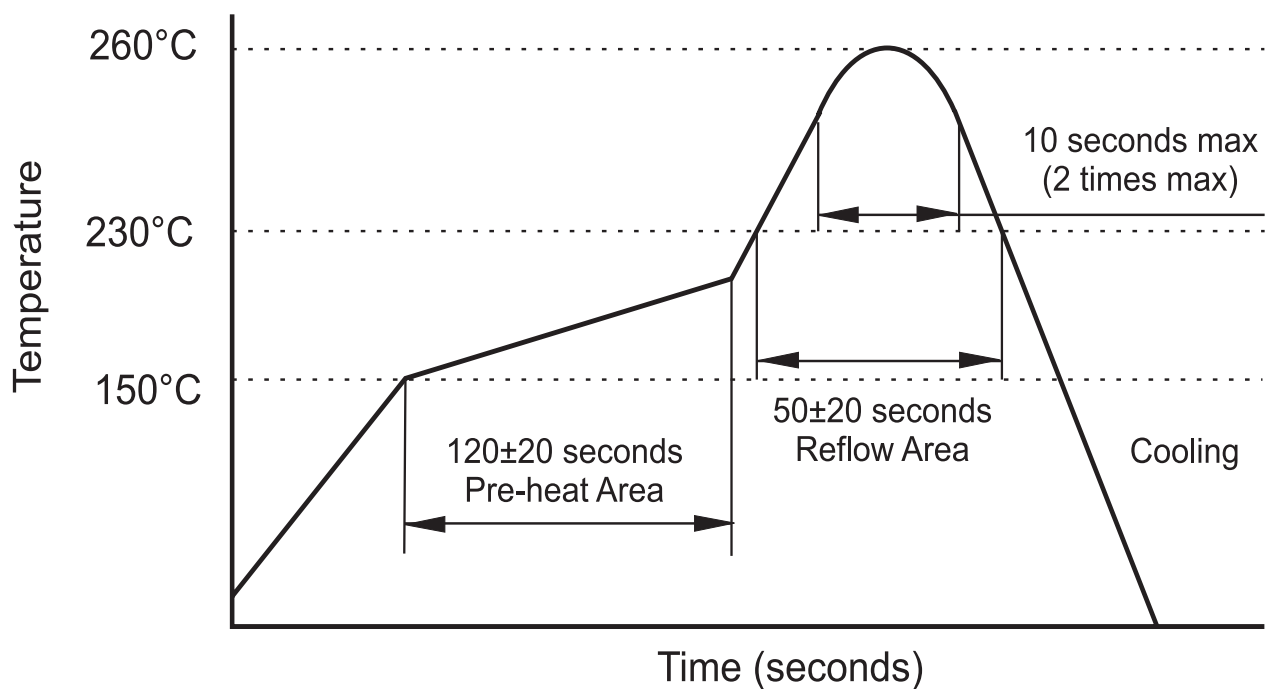
- 1- INH
- 2- NC
- 3- GND
- 4- Output - Q
- 5- Comp. Output - QN
- 6- Vdd

Carrier Tape Dimensions:



Dimensions are millimeters.

Solder Reflow Characteristics:



How to build a Part Number:

Series	S	Parameter
Package	7A	5.0 x 7.0 mm - 6 Pad
Supply Voltage	25	+2.5 Vdd \pm 5%
	33	+3.3 Vdd \pm 5%
Temperature Stability	10	\pm 100 PPM
	05	\pm 50 PPM
	03	\pm 30 PPM
-		
Frequency	10.000 to 625.000	MHz
-		
Output Load	P	LVPECL
-		
Temperature Range	See Notes	0 to +70 °C
	X	-40 to +85 °C
-		
Packaging	R	Tape and 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: \pm 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

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.