

**RoHS Compliant
Pb - Lead Free**

Ltr	Revisions	Date	Appr

Electrical Specifications:

Frequency Range	0.500~156.250	0.500~156.250	0.500~156.250	0.500~54.000	0.500~100.000	MHz	
Frequency Stability	±20 ~ ±100					ppm	
Aging per Year	±3					ppm Max.	
Operating Temperature Range	Standard	-10 ~ +70				°C	
	Extended	-40 ~ +85					
Storage Temperature Range	-55 ~ +125						
Supply Voltage	1.8 ± 5%	2.5 ± 5%	3.3 ± 10%	1.62 ~ 3.63	5.0 ± 10%	VDD	
Input Current	0.500 to 9.999MHz	5	6	7	7	10	mA Max.
	10.000 to 19.999MHz	6	7	7	7	15	
	20.000 to 31.999MHz	6	8	12	12	25	
	32.000 to 49.999MHz	15	20	20	20	35	
	50.000 to 79.999MHz	15	20	25	25	50	
	80.000 to 99.999MHz	20	25	30		60	
100.000 to 156.250MHz	25	30	40		80		
Output Voltage	Logic High (Voh)	90%				VDD Min.	
	Logic Low (Vol)	10%				VDD Max.	
Output Symmetry (Duty Cycle)	Standard	40 ~ 60 (at 50% VDD)				%	
	Tight	45 ~ 55 (at 50% VDD)					
Output Load	15					pF Max.	
Rise and Fall Time	0.500 to 31.999MHz	5	5	10	10	10	ns Max.
	32.000 to 49.999MHz	5	5	10	10	6	
	50.000 to 79.999MHz	4	4	8	8	5	
	80.000 to 99.999MHz	3	3	5		5	
	100.000 to 156.250MHz	3	3	4		4	
Phase Jitter (12 KHz to 20 MHz)	1					ps Max. RMS	
Enable-Disable Function	Tri-State						
Start Up Time	10					ms Max.	

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, vibration, and 1st year aging at +25°C.



Accurate Kinetic Energy

No.11-3 Jianguo Rd., T.E.P.Z. 42760 Taiwan

All dimensions are millimeters.

CAD: TCR

Review: EG

Appr: JL

Page: 1/4 Date: July 1,2020

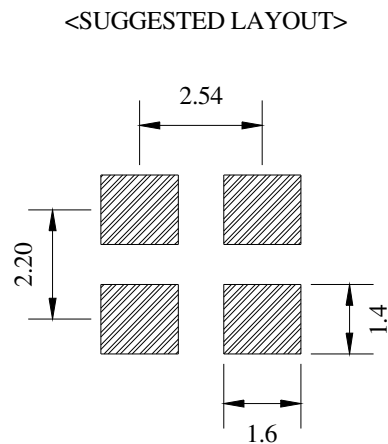
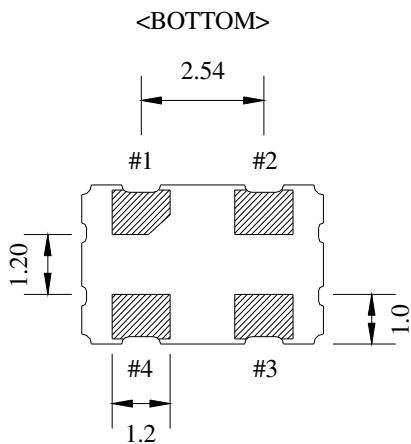
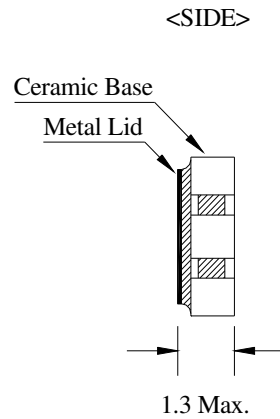
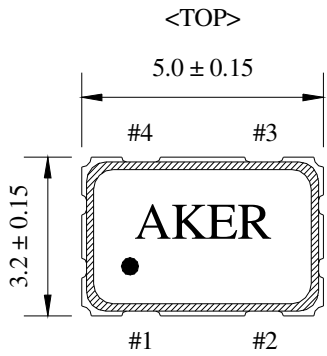
Specification Title:

**HCMOS Output Clock Oscillator
Low Profile
5.0 x 3.2 millimeter Surface Mount
General Product Specification**

Part Number:

S5 Series

Mechanical Outline and Solder Pad Layout:



Pin Connection	
PIN No.	Connection
#1	Enable/Disable
#2	GND
#3	Output
#4	VDD

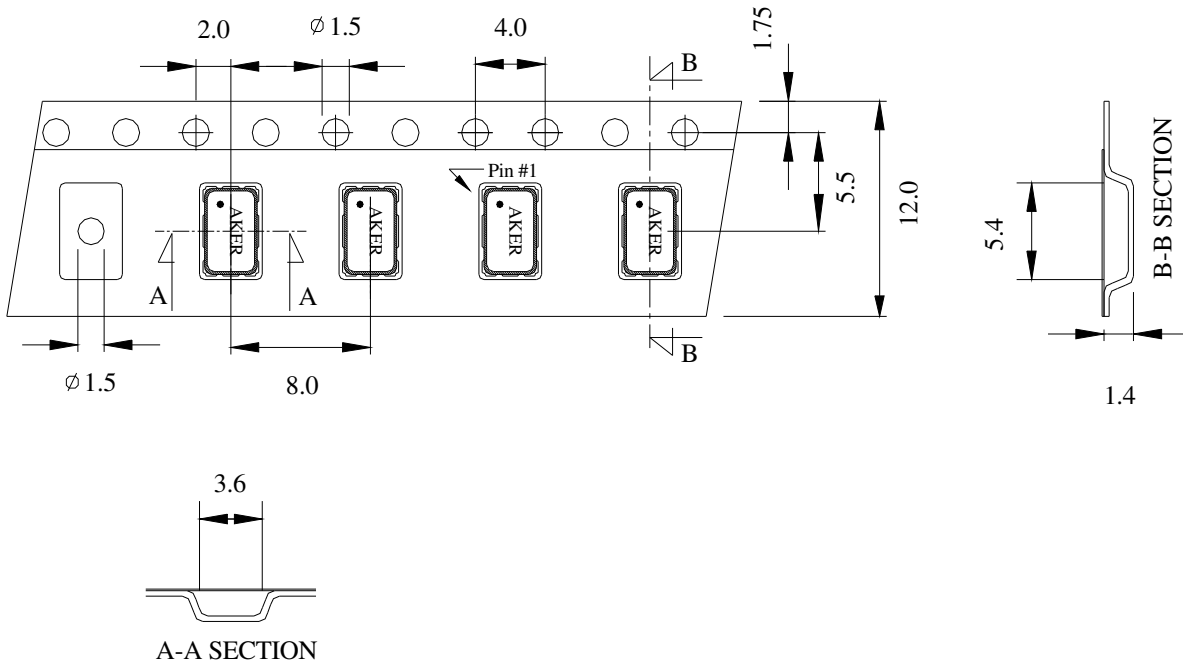
Enable/Disable Function	
PIN #1	PIN #3
HIGH or OPEN	Operating
LOW	High Impedance

Package is Seam Sealed Ceramic-Metal.

Terminator Pads are Ni/Au.

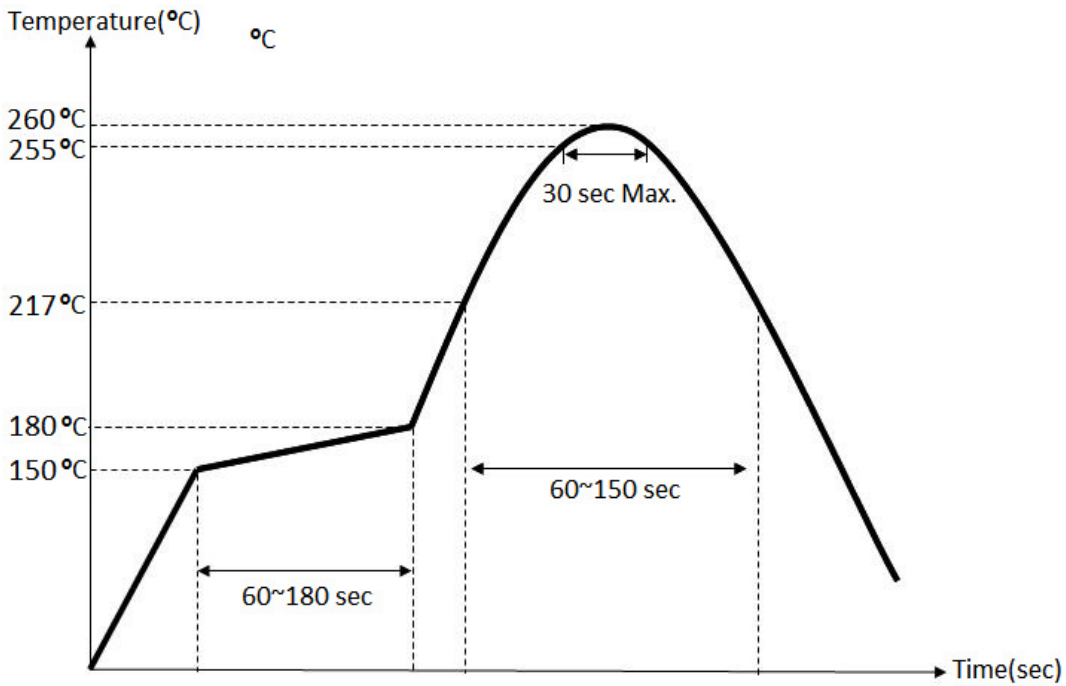
Dimensions are millimeters.

Carrier Tape Dimensions:



Dimensions are millimeters.

Solder Reflow Characteristics:



How to build a Part Number:

Series	S	Parameter
Package	5	5.0 x 3.2 mm
Supply Voltage	50	+5.0 VDD ± 10%
	33	+3.3 VDD ± 10%
	25	+2.5 VDD ± 5%
	18	+1.8 VDD ± 5%
	M	+1.62 ~ +3.63 VDD
Temperature Stability	10	±100 ppm
	05	±50 ppm
	025	±25 ppm
	020	±20 ppm
Duty Cycle	See Notes	40%~60%
	T	45%~55%
Frequency	0.500~156.250	MHz
Temperature Range	See Notes	-10 ~ +70 °C
	X	-40 ~ +85 °C
Packaging	M	250pcs Reel
	R	1000pcs Reel

Part Number Example:

S53305T-50.000-X-R

S5: 5.0 x 3.2 mm SMD Package

33: +3.3±10% VDD Supply Voltage

05: ±50 ppm Temperature Stability

T: 45%~55% Tight Symmetry

50.000 MHz Nominal Frequency

X: -40 ~ + 85°C Extended 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.