



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:

**Programmable Clock Oscillator  
Miniature - Low Profile  
5.0 x 3.2 millimeter Surface Mount  
General Product Specification**

Part Number:

**S5P Series**

**Electrical Specifications:**

Frequency Range		1.000~110.000	1.000~166.000	1.000~200.000	MHz
Frequency Stability		±25 ~ ±100			ppm
Aging per Year		±3			ppm Max.
Operating Temperature Range	Standard	-20 ~ +70			°C
	Extended	-40 ~ +85			
Storage Temperature Range		-55 ~ +125			
Supply Voltage		1.8 ± 5%	2.5 ± 5%	3.3 ± 10%	VDD
Input Current	1.000 to 9.999MHz	8	8	8	mA Max.
	10.000 to 19.999MHz	10	10	10	
	20.000 to 31.999MHz	12	12	12	
	32.000 to 49.999MHz	15	15	15	
	50.000 to 79.999MHz	20	20	20	
	80.000 to 99.999MHz	25	25	25	
	100.000 to 200.000MHz	30	30	30	
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 Level		CMOS			
Output Load		15			pF Max.
Rise and Fall Time	1.000 to 31.999MHz	6	6	6	ns Max.
	32.000 to 200.000MHz	5	5	5	
Enable-Disable Function		Tri-State			
Start Up Time		10			ms Max.

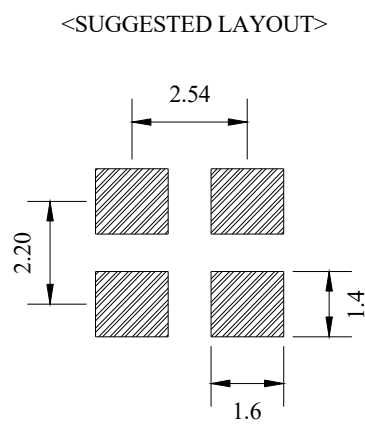
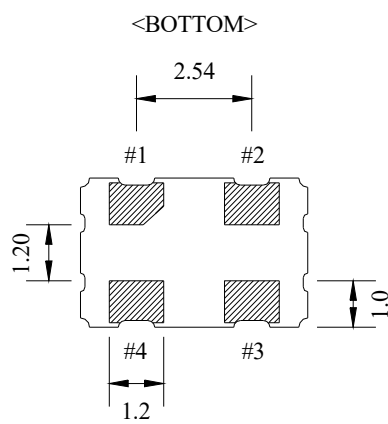
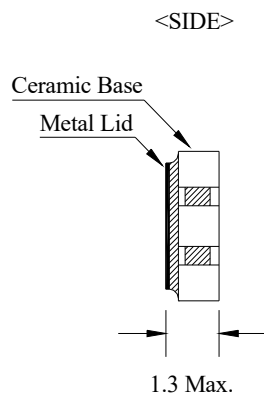
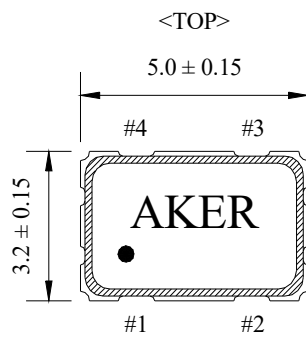
Temperature stability is Inclusive of all conditions:

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.

**RoHS Compliant  
Pb - Lead Free**

Ltr	Revisions	Date	Appr

## Mechanical Outline and Solder Pad Layout:



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

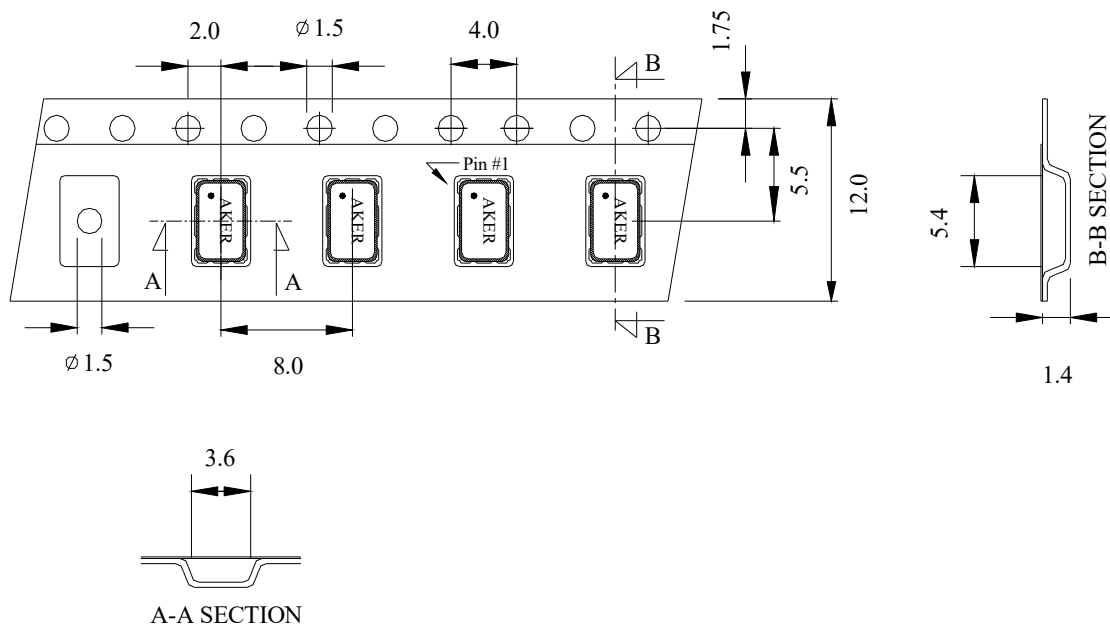
Enable/Disable Function	
PIN #1	PIN #3
HIGH or OPEN	Operating
LOW	High Impedance

**Package is Seam Sealed Ceramic-Metal.**

**Terminator Pads are Ni/Au.**

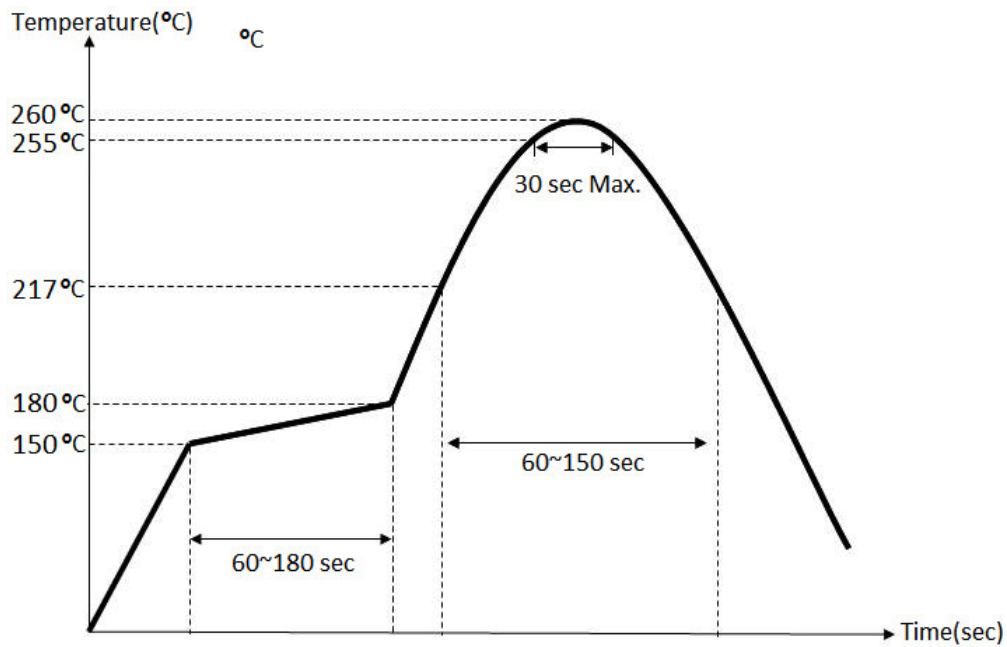
**Dimensions are millimeters.**

### Carrier Tape Dimensions:



Dimensions are millimeters.

### Solder Reflow Characteristics:



### How to build a Part Number:

Series	S	Parameter
Package	5P	5.0 x 3.2 mm
Supply Voltage	33	+3.3 VDD ± 10%
	25	+2.5 VDD ± 5%
	18	+1.8 VDD ± 5%
Temperature Stability	10	±100 ppm
	05	±50 ppm
	03	±30 ppm
	025	±25 ppm
Duty Cycle	See Notes	40%~60%
	T	45%~55%
	-	
Frequency	1.000~54.000	MHz
	-	
Temperature Range	See Notes	-20 ~ +70 °C
	X	-40 ~ +85 °C
	-	
Packaging	M	250pcs Reel
	R	1000pcs Reel

### Part Number Example:

S5P3305T-25.000-X-R

S5P: 5.0 x 3.2 mm SMD Package

33: +3.3±5% VDD Supply Voltage

05: ±50 ppm Temperature Stability

T: 45%~55% Tight Symmetry

25.000 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.