



Accurate Kinetic Energy

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

All dimensions are millimeters.

CAD: TCR

Review: EG

Appr: JL

Page: 1/3 Date: September 21, 2026

Specification Title:

**Clock Oscillator
LVDS - Complimentary Output
2.0 x 1.6 millimeter Surface Mount
General Product Specification**

Part Number:

S1A3302-312.500-L-X2-R

Electrical Specifications:

Frequency Range	312.500	MHz
Frequency Stability	±20	ppm
Aging per Year	±3	ppm Max.
Operating Temperature Range	-40 ~ +105	°C
Storage Temperature Range	-55 ~ +125	
Supply Voltage	3.3 ± 5%	VDD
Input Current	38	mA Max.
Output Voltage	Logic High (Voh)	VDD Max.
	Logic Low (Vol)	VDD Min.
Differential Output Voltage (V _{OD})	250 ~450	mV
Output Symmetry (Duty Cycle)	45 ~ 55	%
Output Type	LVDS	
Output Load (Between Q and QN)	100	ohm
Rise and Fall Time	0.35	ns Max.
Enable-Disable Function	Tri-State	
Input Enable Voltage	70%VDD	VDD Min.
Input Disable Voltage	30%VDD	VDD Max.
Phase Jitter (12 KHz to 20 MHz)	30(typ) 50(max)	fs RMS

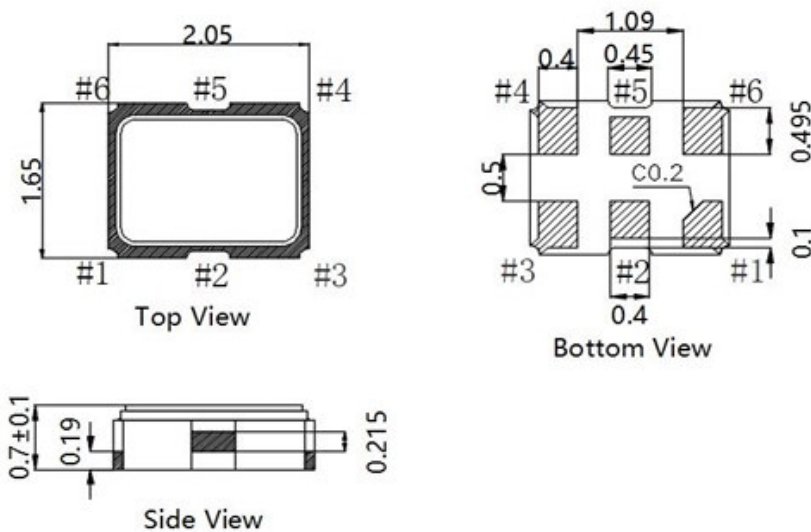
Temperature stability is Inclusive of all conditions:

Calibration Tolerance at +25°C, frequency stability over the operating temperature range, supply voltage change, output load change, shock, 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	NC
#3	GND
#4	Output - Q
#5	Output - QN
#6	VDD

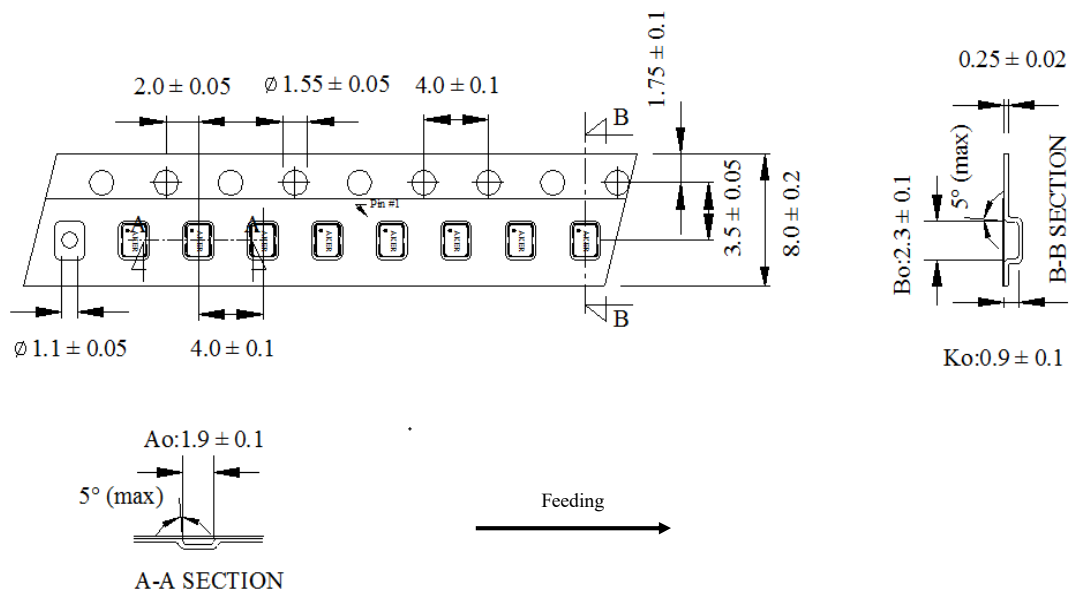
Enable/Disable Function	
PIN #1	PIN #4 & #5
HIGH or OPEN	Operating
LOW	High Impedance

Package is Seam Sealed Ceramic-Metal.

Terminator Pads are Ni/Au.

Dimensions are millimeters.

Carrier Tape Dimensions:



Dimensions are millimeters.

Solder Reflow Characteristics:

