



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: April 30,2026

Specification Title:

Voltage Controlled Clock Oscillator

2.0 x 1.6 millimeter Surface Mount General Product Specification

Part Number:

V1 Series

Electrical Specifications:

Frequency Range		2.500 ~ 54.000	MHz
Frequency Stability		±25 ~ ±100	ppm
Aging per Year		±3	ppm Max.
Operating Temperature Range	Standard	-20 ~ +70	°C
	Extended	-40 ~ +85 Or Specify (-40~+125 is available)	
Storage Temperature Range		-55 ~ +125	
Supply Voltage		3.3 ± 10%	VDD
Input Current		12	mA Max.
Output Voltage	Logic High (Voh)	90%	VDD Min.
	Logic Low (Vol)	10%	VDD Max.
Output Symmetry (Duty Cycle)	Tight	45 ~ 55 (at 50% VDD)	%
Output Type		CMOS	
Output Load		15	pF Max.
Rise and Fall Time		5	ns Max.
Frequency Control Voltage		1.65 ± 1.65	VDD
Frequency Pulling Range		±50 ~ ±100	ppm Min.
Linearity - Positive Slope		10%	% Max.
Phase Jitter (12 KHz to 20 MHz)		1	ps Max. RMS
Start Up Time		5	ms Max.

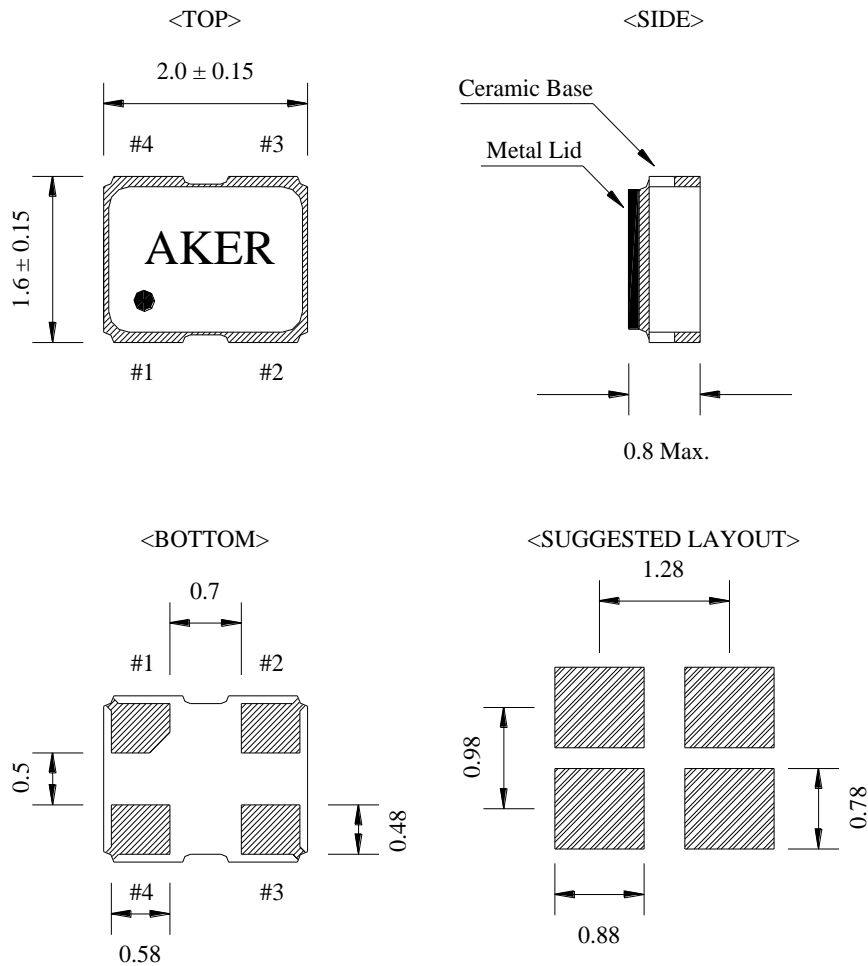
Temperature stability is Inclusive of all conditions:

Calibration Tolerance at +25°C, frequency stability over the operating temperature range, supply voltage change, output load change, shock, vilbration, 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	VCON
#2	GND
#3	Output
#4	VDD

Package is Seam Sealed Ceramic-Metal.

Terminator Pads are Ni/Au.

Dimensions are millimeters.

How to build a Part Number:

Series	V	Parameter
Package	1	2.0 x 1.6 mm
Supply Voltage	33	+3.3 VDD ± 10%
Temperature Stability	10	±100 ppm
	05	±50 ppm
	025	±25 ppm
Frequency Pulling Range	100	±100 ppm
	50	±50 ppm
Duty Cycle	T	45%~55%
Frequency	2.500~54.000	MHz
Temperature Range	See Notes	-20 ~ +70 °C
	X	-40 ~ +85 °C
	X1	-40 ~ +125 °C
	X2	-40 ~ +105 °C
Packaging	M	250pcs Reel
	R	1000pcs Reel
	R3	3000pcs Reel

Part Number Example:

V13305100T-25.000-X-R3

V1: 2.0 x 1.6 mm SMD Package VCXO

33: +3.3±10% VDD Supply Voltage

05: ±50 ppm Temperature Stability

100: ±100 ppm Min. Frequency Pulling Range

T: 45%~55% Tight Symmetry

25.000 MHz Nominal Frequency

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

R3: Tape and Reel Packaging - 3000pcs Reel

Notes:

- 1- Product is shipped in Tape and Reel configuration.
- 2- Quantities less than 250pcs are shipped in tape only.
- 3- Specification subject to change without notice.