

Helping Customers Innovate, Improve & Grow
Table 1. Electrical Performance

Parameter	Symbol	Min.	Typ	Max	Units
Nominal Frequency	F_{NOM}	3.500		100.000	MHz
Mode		Fundamental, 3rd Overtone			
Operating Temperature Range	T_{OP}	0/70, -10/70, -20/70, -40/85			°C
Stability Over T_{OP}^1	F_{STAB}	±10		±100	ppm
Frequency Tolerance ²	F_{TOL}		±10		ppm
Load Capacitance	C_L	6		32	pF
Shunt Capacitance	C_o			5	pF
Drive Level			10	100	uW
Aging / 1st year (at 25 °C)	F_{AGE}			±5	ppm
Insulation Resistance		500			MOhm
Storage Temperature	T_{STO}	-40		90	°C
Equivalent Series Resistance					
Crystal Frequency	ESR				Ohm
3.500MHz-3.579MHz				250	
3.580MHz-4.000MHz				150	
4.001MHz-5.000MHz				120	
5.001MHz-6.000MHz				100	
6.001MHz-7.000MHz				80	
7.001MHz-10.000MHz				60	
10.001MHz-14.000MHz				50	
14.001MHz-20.000MHz				40	
20.001MHz-40.000MHz, Fundamental				30	
24.001MHz-35.000MHz, 3rd Overtone				100	
35.000MHz-100.000MHz, 3rd Overtone				80	

Notes:

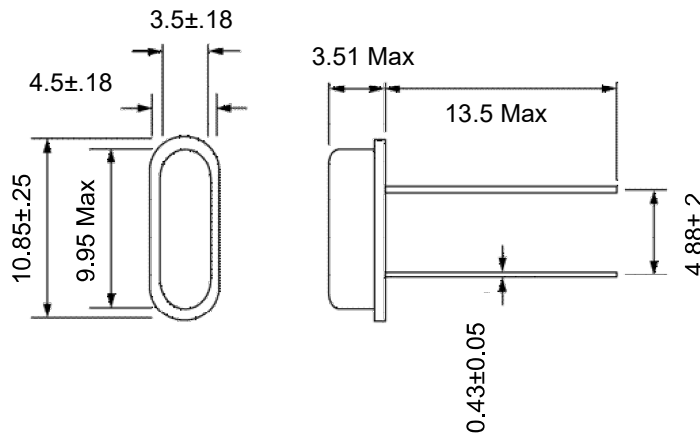
1. Referenced to the Frequency at 25 °C.

2. Frequency measured at 25 °C ± 3 °C.

Product is compliant to RoHS directive and fully compatible with lead free assembly.



Package Drawing



All Dimensions in mm

Ordering Information

VXA4 - XXX - XX - xxMxxxxxxxx

Product

VXA4: 3.6mm tall
2 lead crystal

Mode

1: Fundamental
3: 3rd Overtone

Temp Stability

D: 15ppm
E: 20ppm
F: 25ppm
G: 30ppm
H: 35ppm
I: 40ppm
J: 45ppm
K: 50ppm
S: 100ppm

Frequency in MHz

Load Capacitance

00: Series Resonance
06-32pF

Operating Temperature

E: -40 to 85 °C
J: -20 to 70 °C
W: -10 to 70 °C
T: 0 to 70 °C

**Note: not all combination of options are available.
Other specifications may be available upon request.*

15ppm stability not available for -40 to 85°C

Revision History

Revision Date	Approved	Description
August 30, 2016	RC	Initial datasheet for factory approval and release to customer.
August 10, 2018	FB	Update logo and contact information



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