

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:

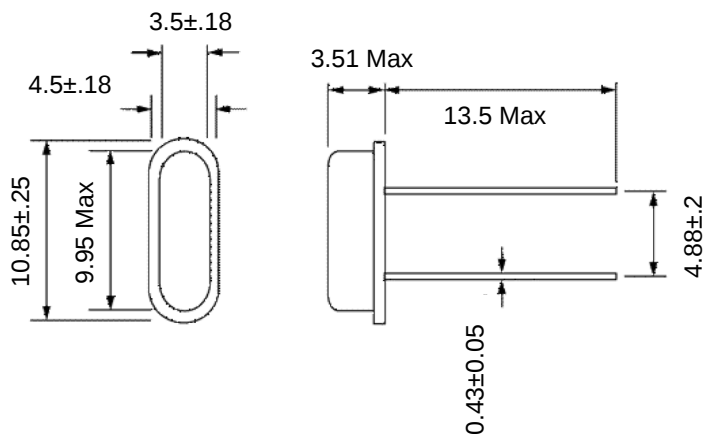
1. Referenced to the Frequency at 25 °C.

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