



## Features and Benefits

Frequency range: 14.85MHz

Supply voltage: 3.3V

Steady current: 1.5mA Max

Output waveform: Clipped sinewave

Frequency stability vs. operating temperature:  $\pm 2.5$ ppm

Phase noise@10KHz: -148dBc/Hz

Operating temperature: -20°C--70°C

Size: 5x3.2x1.1mm

## Typical Applications

WLAN

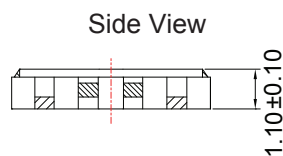
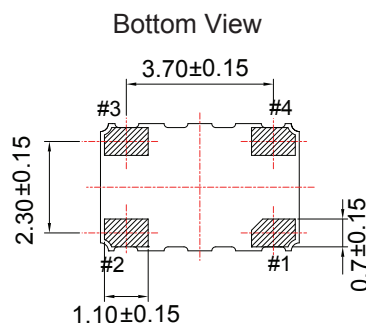
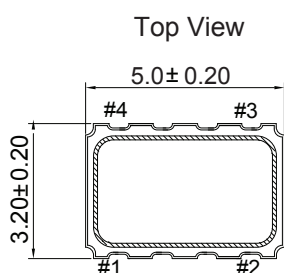
Telecommunication

Mobile Application

## Mechanical Drawing & Pin Connections

Drawing No:

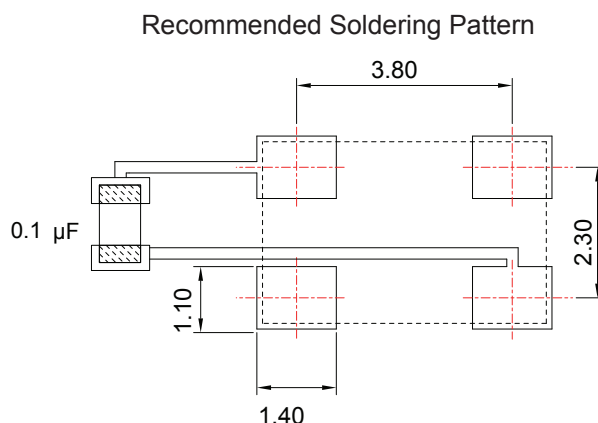
MD220020-1



Pin#	Function
1	Vcon
2	GND
3	Output
4	Vcc

Unit in mm

1mm = 0.0394 inches



To ensure optimal oscillator performance, place a by-pass capacitor of 0.1uF as close to the part as possible between Vcc and GND PAD



## Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	f <sub>0</sub>			14.85		MHz	
RF Output							
Output Waveform			Clipped sinewave				
Output Level			0.8			Vp-p	
Output Load			10Kohm//10pF				
Power Supply							
Voltage	V <sub>cc</sub>	±5%		5.0		V	
Current					1.5	mA	
Startup Time					2.0	mSec	
Frequency Control							
Control Voltage Range			0.5		2.5	V	
Pulling Range			±5.0			ppm	
Vc Input Impedance			500			kohm	
Frequency Stability							
Vs. Temperature		-20°C to +70°C			±2.5	ppm	
Vs. Supply Voltage		±5%			±0.2	ppm	
Vs. Load		±10%			±0.2	ppm	
Vs. Aging		1 <sup>st</sup> year			±1.0	ppm	
Tolerance					±2.0	ppm	
Phase noise		@100Hz		-115		dBc/Hz	
		@1KHz		-135		dBc/Hz	
		@10KHz		-148		dBc/Hz	
Environmental Conditions							
Operating temperature range		-40°C to +85°C					