



### Features and Benefits

Frequency range: 10MHz  
Supply voltage: 0.9V  
Current: 1.5mA Max.  
Frequency stability vs. temperature: ±25PPM  
Aging: ±3PPM per year  
Operating temperature: -10°C to +60°C  
Size: 2.5x2.0x0.81 mm

### Typical Applications

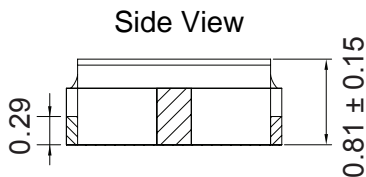
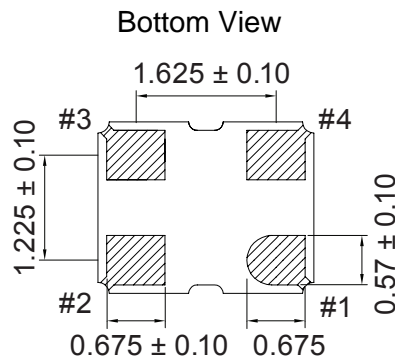
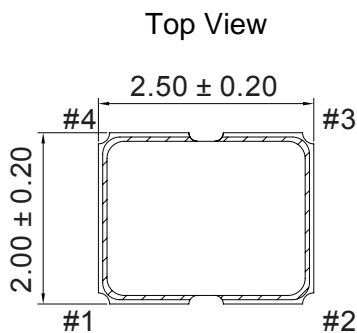
IoT  
Smartphone  
Digital Camera  
Game Console  
Wearable Device  
Digital Consumer Electronics

### Description

XO2520BM01-LP-10MHz-111 is the low power crystal oscillator. The power consumption can be less than 1.5mA. It can be widely used in the low power consumption applications.

### Mechanical Drawing & Pin Connections

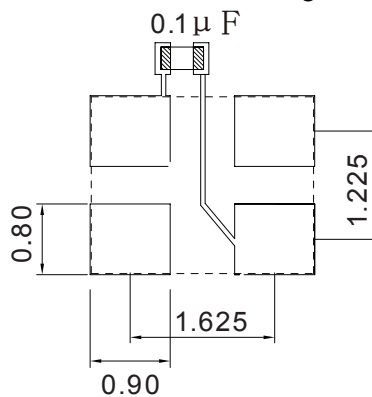
Drawing No: MD220022-1



Pin#	Function
1	Tri-state
2	GND
3	Output
4	V <sub>CC</sub>

Unit in mm  
1mm = 0.0394 inches

#### Recommended Soldering Pattern



To ensure optimal oscillator performance, place a by-pass capacitor of 0.1uF as close to the part as possible between V<sub>CC</sub> and GND PAD



**Specifications**

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	$f_0$			10		MHz	
<b>RF Output</b>							
Output Waveform			CMOS				
Load				15		pF	
Duty Cycle			45		55	%	
Rise & Fall Time					3	ns	
Tri-State (Input to Pin1)		Enable (High voltage or floating)	0.7 $V_{cc}$			V	
		Disable (Low voltage or GND)			0.3 $V_{cc}$	V	
Startup Time					4	ms	
<b>Power Supply</b>							
Voltage	$V_{cc}$	$\pm 5\%$		0.9		V	
Current		At 15pF load			1.5	mA	
		No load condition			1.0	mA	
Stand by Current					100	uA	
<b>Frequency Stability</b>							
Versus Temperature		@-10°C to +60°C			$\pm 25$	ppm	
Aging@+25°C		1 <sup>st</sup> year			$\pm 3.0$	ppm	
<b>Environmental Conditions</b>							
Operating temperature range		-10°C to +60°C					