# **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: -20°C to +70°C

Size: 2.5x2.0x0.81 mm

# **Typical Applications**

loT Smartphone Digital Camera Game Console Wearable Device Digital Consumer Electronics

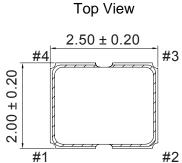
### **Description**

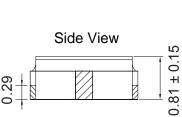
XO2520BM01-LP-10MHz-211 is the low power crystal oscillator. The power consumption can be less than 1.5mA. It can be widely used in the low power consumption applications.

# **Mechanical Drawing & Pin Connections**

**Drawing No:** 

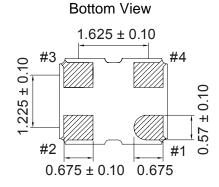
MD220022-1



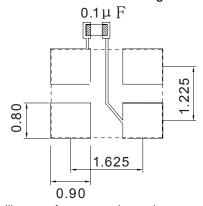


GND				

Unit in mm 1mm = 0.0394 inches



#### Recommended Soldering Pattern



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



# Dynamic Engineers Inc."

2550 Gray Falls Dr., Suite#128, Houston, TX, 77077 USA TEL: 1-281-870-8822 EMAIL: Sales@DynamicEng.com

# XO2520BM01-LP-10MHz-&%

Ultra-low Power Crystal Oscillator

# **Specifications**

Oscillator	Sy	Condition	Value			Unit	Note	
Specification	m		Min.	Typ.	Max.			
Operational Frequency	f <sub>0</sub>			10		MHz		
RF Output								
Output Waveform				CMOS				
Load				15		pF		
Duty Cycle			45		55	%		
Rise & Fall Time					3	ns		
Tri-State		Enable (High voltage or floating)	0.7 V <sub>cc</sub>			V		
(Input to Pin1)		Disable (Low voltage or GND)			0.3 V <sub>cc</sub>	V		
Startup Time					4	ms		
Power Supply								
Voltage	$V_{cc}$	±5%		0.9		V		
Current		At 15pF load			1.5	mA		
		No load condition			1.0	mA		
Stand by Current					100	uA		
Frequency Stability								
Versus Temperature		@-20°C to +70°C			±25	ppm		
Aging@+25°C		1 <sup>st</sup> year			±3.0	ppm		
<b>Environmental Conditio</b>	ns							
Operating temperature range   -20°C to +70°C								