



Features and Benefits

Frequency range: 10MHz
Supply voltage: 0.9V
Current: 1.5mA Max.
Frequency stability vs. temperature: ± 50 PPM
Aging: ± 3 PPM per year
Operating temperature: -10°C to $+60^{\circ}\text{C}$
Size: 3.2x2.5x0.95 mm

Typical Applications

IoT
Smartphone
Digital Camera
Game Console
Wearable Device
Digital Consumer Electronics

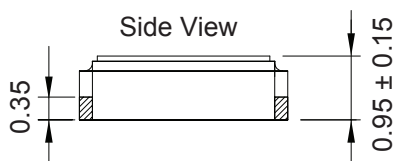
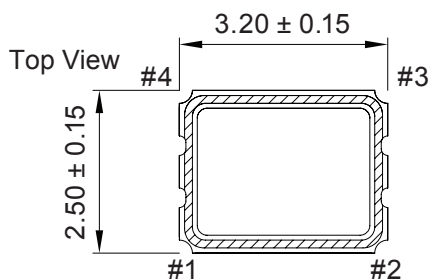
Description

XO3225BM01-LP-10MHz-121 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.

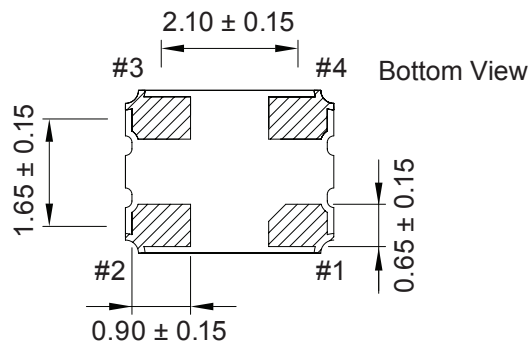
Mechanical Drawing & Pin Connections

Drawing No: MD220023-1

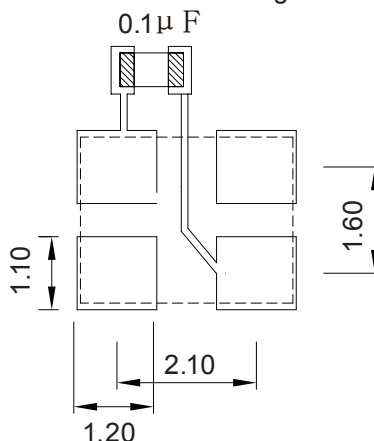


Pin#	Function
1	Tri-state
2	GND
3	Output
4	V _{CC}

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_{CC} and GND PAD

**Specifications**

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	f_0			10		MHz	
RF Output							
Output Waveform			CMOS				
Output level		High	2.97			V	
		Low			0.33	V	
Load				15		pF	
Duty Cycle			45		55	%	
Rise & Fall Time		measured between 10% and 90% of V_{cc} , with an output load of 15pF			4	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	
Power Supply							
Voltage	V_{cc}	$\pm 5\%$		0.9		V	
Current		At 15pF load			1.5	mA	
		No load condition			0.9	mA	
Stand by Current					100	uA	
Frequency Stability							
Versus Temperature		@-10°C to +60°C			± 50	ppm	
Period jitter (Pk-Pk)					40	ps	
RMS phase jitter		Integrated 12KHz to 20MHz			1	ps	
Aging@+25°C		1 st year			± 3.0	ppm	
Environmental Conditions							
Operating temperature range		-10°C to +60°C					
Storage temperature range		-55°C to +125°C					