



Features and Benefits

Frequency range: 10MHz
Supply voltage: 0.9V
Current: 1.5mA Max.
Frequency stability vs. temperature: ±50PPM
Aging: ±3PPM per year
Operating temperature: -20°C to +70°C
Size: 3.2x2.5x0.95 mm

Typical Applications

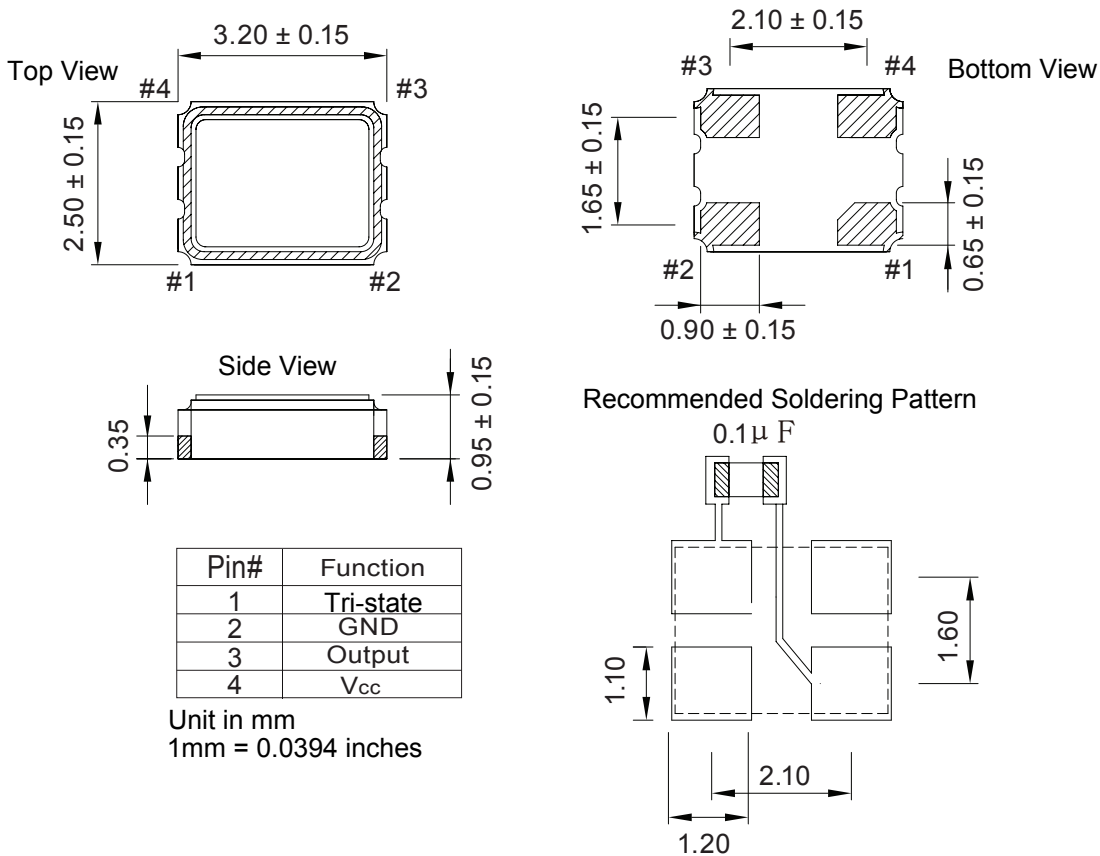
- IoT
- Smartphone
- Digital Camera
- Game Console
- Wearable Device
- Digital Consumer Electronics

Description

XO3225BM01-LP-10MHz-221 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



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 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}	±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		@-20°C to +70°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		-20°C to +70°C					
Storage temperature range		-55°C to +125°C					