Dynamic Engineers Inc.
2550 Gray Falls Dr., Suite#128, Houston, TX, 77077 USA
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XO3225BM01-LP-10MHz-211
Ultra-low Power Crystal Oscillator

Features and Benefits

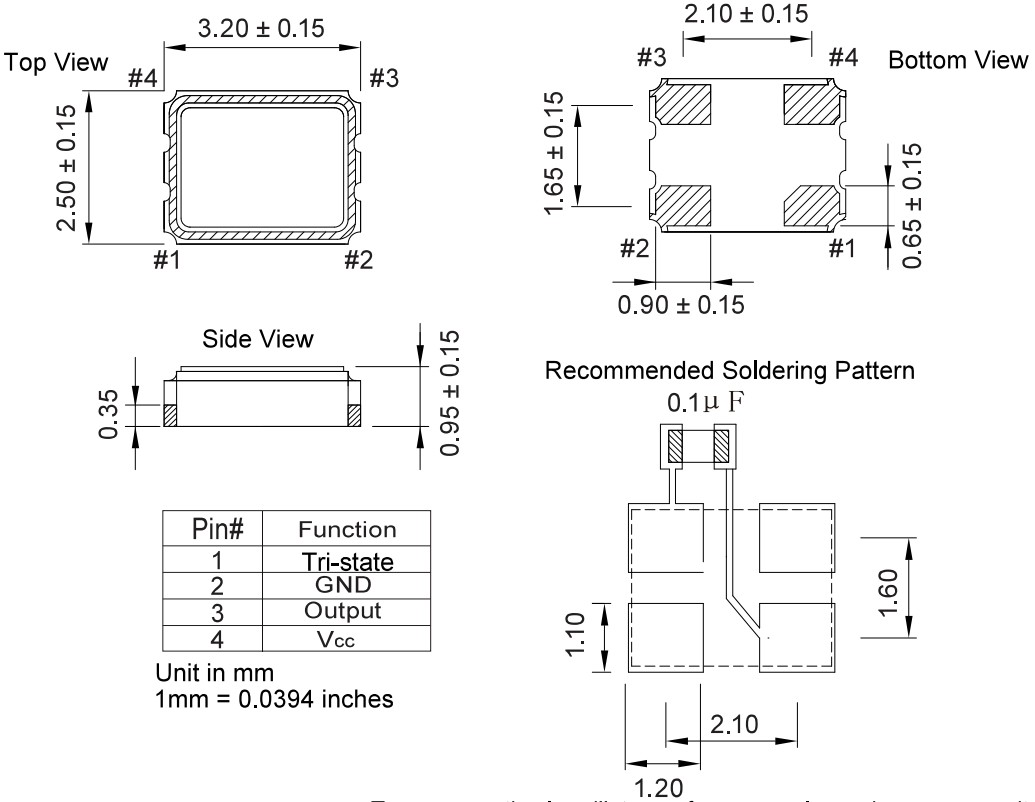
Frequency range: 10MHz
Supply voltage: 0.9V
Current: 1.5mA Max.
Frequency stability vs. temperature: ±25PPM
Aging: ±3PPM per year
Operating temperature: -20°C to +70°C
Size: 3.2x2.5x0.95 mm

Description

XO3225BM01-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: MD220023-1



Pin#	Function
1	Tri-state
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

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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 Vcc, 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			±25	ppm	
Period jitter (Pk-Pk)					40	ps	
RMS phase jitter		Integrated 12KHz to 20MHz			1	ps	
Aging@+25°C		1st year			±3.0	ppm	
Environmental Conditions							
Operating temperature range		-20°C to +70°C					
Storage temperature range		-55°C to +125°C					