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

VCXO7501BM-122.88MHz-A-V
7.0x5.0mm SMD 122.88MHz VCXO

Features and Benefits

Typical 7.0 x 5.0 x 1.75 mm 6 pads ceramic SMD package.
Tight symmetry (45 to 55%) available.
Output frequency up to 122.88MHz.
Tri-state enable/disable

Typical Applications

Set-top Box, HDTV
WiMAX/WLAN
XDSL/ VoIP
Cable modem

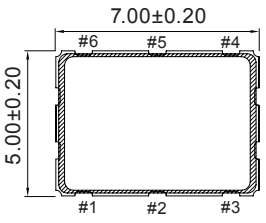
Description

VCXO7501BM-122.88MHz-A-V offers low phase noise, all in a compact package to suit the different communication needs.

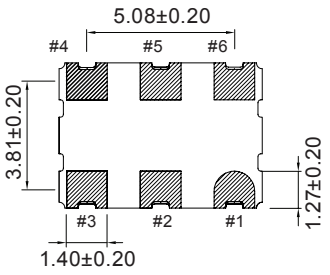
Mechanical Drawing & Pin Connections

Drawing No: **MD200031-1**

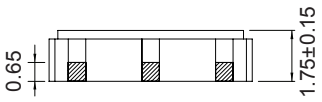
[TOP VIEW]



[BOTTOM VIEW]



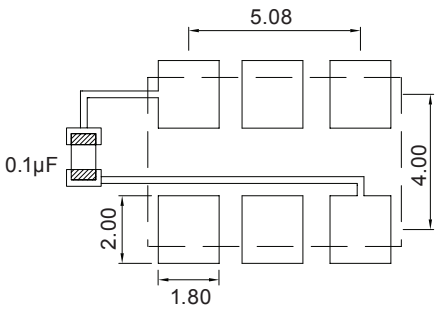
[SIDE VIEW]



Pin#	Function
1	Vcon
2	Tri-State
3	GND
4	Outpout
5	NC
6	VDD

Unit in mm
1mm = 0.0394 inches

Solder PAD Layout



To ensure optimal oscillator performance, place a by-pass capacitor of 0.1μF as close to the part as possible between Vdd and GND pads.

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

VCXO7501BM-122.88MHz-A-V
7.0x5.0mm SMD 122.88MHz VCXO

Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	F_{nom}			122.88		MHz	
RF Output							
Signal Waveform				CMOS			
H-Level Voltage	V_H		2.97			V	
L- Level Voltage	V_L				0.33	V	
Transition time		Rise/Fall time			2	ns	
Duty Cycle			45	50	55	%	
Load					15	pF	
Power Supply							
Tri-State		Output active	2.31 or floating			V	
		High impedance state			0.99	V	
Supply Voltage	V_{dd}		3.135	3.3	3.465	V	
Start-up Time					5	ms	
Current Consumption		At maximum voltage			40	mA	
VC Input Impedance			10000			Kohm	
Frequency Adjustment Range							
Absolute Pulling Range (APR)			±50			ppm	
Control voltage	V_c		0	1.65	3.3	V	
Linearity				10%			
Frequency Stability							
Frequency stability vs. temperature			-30		+30	ppm	
Aging 1st year			-3		+3	ppm	
RMS phase Jitter		12KHz-20MHz			1	pS	
Modulation Bandwidth (BW)			15			KHz	
SSB Phase noise		100Hz		-90		dBc	
		1kHz		-120		dBc	
		10KHz		-130		dBc	
		100KHz		-140		dBc	
Environmental,Mechanical Conditions							
Operating temperature range	-40°C to +85°C						
Storage temperature range	-55°C to +125°C						