



# Dynamic Engineers Inc.

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**VCXO2520BM-LJ\_LVPECL-122.88MHz-232**  
2.5x2.0mm 122.88MHz LVPECL VCXO

## Features and Benefits

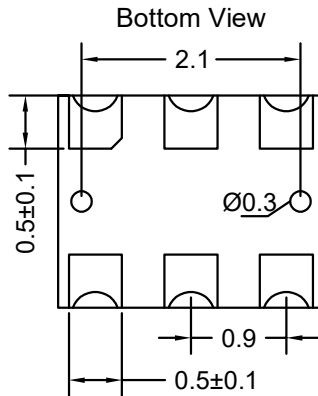
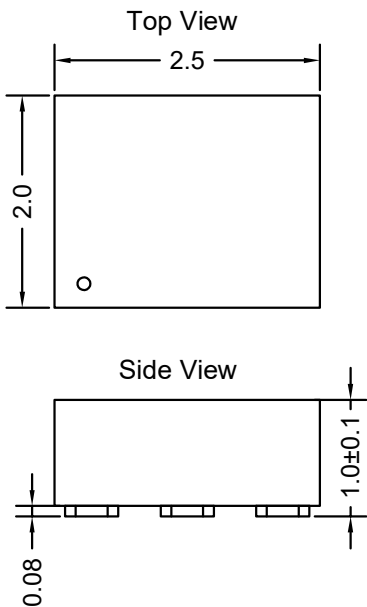
- Frequency range: 122.88MHz
- Output: LVPECL
- Supply voltage: 3.3V
- Current: 110mA Max.
- Frequency stability vs. temperature:  $\pm 50$ PPM
- Operating temperature:  $-20^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$
- Size: 2.5x2x1mm
- Package type: SMD

## Typical Applications

- Defense Systems
- Mobile Radar Station
- Gigabit Ethernet, SONET/SDH
- Server & Storage, Data Center
- SD/HD Video, FPGA Clock Generation

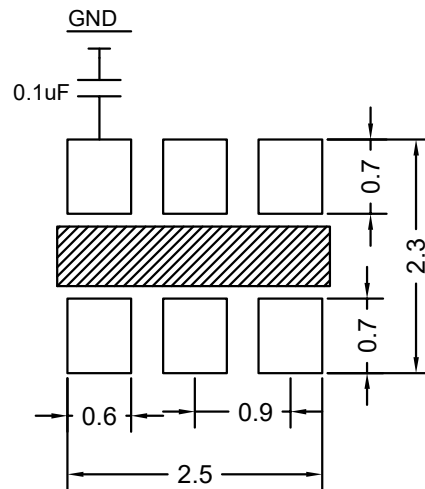
## Mechanical Drawing & Pin Connections

**Drawing No:** MD240070-1



PIN	Function
#1	Control Voltage
#2	OE
#3	GND
#4	OUTPUT
#5	OUTPUT_N
#6	Supply Voltage

Unit in mm  
1mm = 0.0394 inches



Please keep the middle area blank.  
Do not layout any lines in this space.  
To ensure optimal oscillator performance, place a by-pass capacitor of 0.1µF as close to the part as possible between Vcc and GND pads



Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	f <sub>0</sub>			122.88		MHz	
<b>RF Output</b>							
Output Waveform			LVPECL				
Output Level		Output high	V <sub>cc</sub> -1.165		V <sub>cc</sub> -0.8	V	
		Output low	V <sub>cc</sub> -2.0		V <sub>cc</sub> -1.55	V	
Duty Cycle			45		55	%	
Rise & Fall Time					0.35	ns	
Startup Time					8	ms	
Tri-State (Input to Pin2)		Enable	0.7 V <sub>cc</sub>			V	
		Disable			0.3 V <sub>cc</sub>	V	
<b>Power Supply</b>							
Voltage	V <sub>cc</sub>	±10%		3.3		V	
Supply Current					110	mA	
<b>Control Voltage</b>							
Control Voltage	V <sub>c</sub>		0.3	1.65	3	V	
Pulling Range			±50		±250	ppm	
Linearity					±10	%	
<b>Frequency Stability</b>							
Versus Temperature					±50	ppm	
RMS Phase Jitter		Integrated 12KHz-20MHz			300	fs	
<b>Environmental Conditions</b>							
Operating temperature range		-20°C to +70°C					