

Dynamic Engineers Inc.

Website: www.DynamicEngineers.com Email: Inquiry@DynamicEngineers.com

VCXO2520BM-LJ_HCSL-113

Low Jitter VCXO_Voltage Controlled Crystal Oscillator

Features and Benefits

Frequency range: 15-700MHz

Output: HCSL Supply voltage: 1.8V Current: 70mA Max.

Frequency stability vs. temperature: ±20PPM Operating temperature: -10°C to +60°C

Size: 2.5x2x1mm Package type: SMD



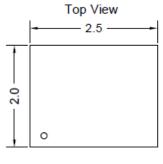
Typical Applications

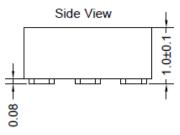
Defense Systems
Mobile Radar Station
Gigabit Ethernet, SONET/SDH
Server & Storage, Data Center
SD/HD Video, FPGA Clock Generation

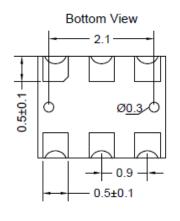
Mechanical Drawing & Pin Connections

Drawing No:

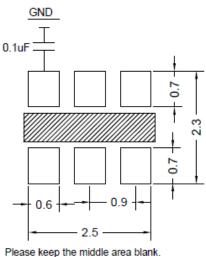
MD240070-1







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



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

Unit in mm 1mm = 0.0394 inches



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Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	f ₀		15		700	MHz	
RF Output							
Output Waveform				HCSL			
Output Level —		Output high	0.66		1.15	V	
		Output low	0		0.15	V	
Duty Cycle			45		55	%	
Rise & Fall Time					0.35	ns	
Startup Time					8	ms	
Tri-State		Enable	$0.7 \ V_{cc}$			V	
(Input to Pin2)		Disable			0.3 V _{cc}	V	
Power Supply							
Voltage	V_{cc}	±10%		1.8		V	
Supply Current		V _{cc} =1.8V			70	mA	
Stand by Current		V _{cc} =1.8V			70	mA	
Control Voltage							
Control Voltage	Vc	V _{cc} =1.8V	0.18	0.9	1.62	V	
Pulling Range			±50		±250	ppm	
Linearity					±10	%	
Modulation Bandwidth			5		20	KHz	
Vc Input Impedance			5			Mohm	
Frequency Stability							
Versus Temperature					±20	ppm	
Dhara Naisa		1KHz		-107			
Phase Noise		10KHz		-117		dDa/U=	
At V _{cc} =3.3V,		100KHz		-125		dBc/Hz	
805.664MHz Frequency		1MHz		-135		1	
RMS Phase Jitter		Integrated 12KHz-20MHz	150		300	fs	
Period Jitter		_			50	ps	
Environmental Conditio	ns						
Operating temperature ra	nge	-10°C to +60°C					