

Dynamic Engineers Inc.

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

Features and Benefits

Frequency range: 15-2100MHz Output: LVPECL Supply voltage: 2.5V Current: 95mA Max. Frequency stability vs. temperature: ±50PPM Operating temperature: -10°C to +60°C Size: 2.5x2x1mm Package type: SMD

Typical Applications

2.0

0.08

0

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

Mechanical Drawing & Pin Connections

Top View

- 2.5 -

Side View

пп

1.0±0.1-

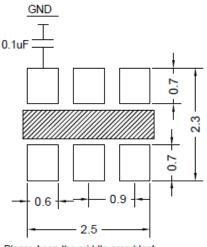
VCXO2520BM-LJ_LVPECL-131

2.5x2.0mm LVPECL VCXO_Voltage Controlled Crystal Oscillator

#5

#6

Bottom View



Drawing No:

MD240070-1

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

OUTPUT_N Supply Voltage 1mm = 0.0394 inches

Dynamic Engineers reserves the right to make changes to the company datasheet(s) along with other information contained inside; such as data tables and araphs without notification to potential customers who may have earlier revisions in their possession.



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2.5x2.0mm LVPECL VCXO_Voltage Controlled Crystal Oscillator

Specifications

Oscillator Specification	Sym	Condition		Value			Note
			Min.	Тур.	Max.		
Operational	fo		15		2100	MHz	
Frequency	10		15		2100		
RF Output							
Output Waveform				VPECL	_		
Output Level		Output high	Vcc-1.165		Vcc-0.8	V	
		Output low	V _{cc} -2.0		V _{cc} -1.55	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	Vcc	±10%		2.5		V	
Supply Current		V _{cc} =2.5V			95	mA	
Stand by Current		V _{cc} =2.5V			95	mA	
Control Voltage							
Control Voltage	Vc	V _{cc} =2.5V	0.25	1.25	2.25	V	
Pulling Range			±50		±250	ppm	
Linearity					±10	%	
Modulation Bandwidth			5		20	KHz	
Vc Input Impedance			5			Mohm	
Frequency Stability							
Versus Temperature					±50	ppm	
Phase Noise		1KHz		-106			
At V _{cc} =3.3V,		10KHz		-115		dBc/Hz	
873.515MHz		100KHz		-123			
Frequency		1MHz		-133			
RMS Phase Jitter		Integrated 12KHz-20MHz	150		300	fs	
Period Jitter					50	ps	
Environmental Condit	ions						<u> </u>
Operating temperature		-10°C to +60°C					

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