

# Dynamic Engineers Inc.

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

### **Features and Benefits**

Frequency range: 15-2100MHz Output: CML Supply voltage: 2.5V Current: 80mA Max. Frequency stability vs. temperature: ±100PPM Operating temperature: -10°C to +60°C Size: 2.5x2x1mm Package type: SMD

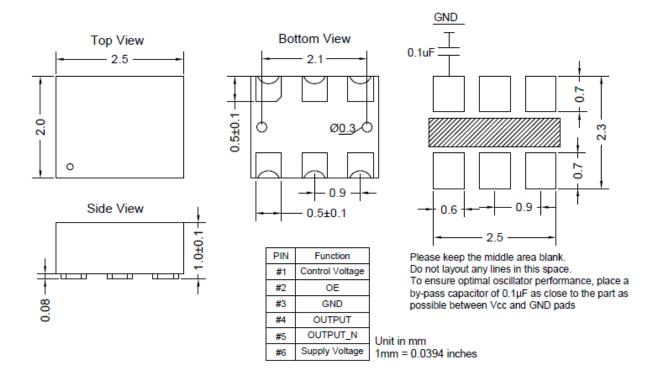


#### **Typical Applications**

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

### **Mechanical Drawing & Pin Connections**





Oscillator

VCXO2520BM-LJ\_CML-141

Low Jitter VCXO\_Voltage Controlled Crystal

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# **Specifications**

Oscillator			Value			Unit	Note
Specification	Sym	Condition	Min.	Тур.	Max.		
Operational Frequency	f <sub>0</sub>		15		2100	MHz	
RF Output							
Output Waveform				CML			
Output Level		Output high	Vcc-0.085		Vcc	V	
		Output low	Vcc-0.6		Vcc-0.32	V	
Duty Cycle			45		55	%	
Rise & Fall Time					0.35	ns	
Startup Time					8	ms	
Tri-State		Enable	0.7 V <sub>cc</sub>			V	
(Input to Pin2)		Disable			0.3 V <sub>cc</sub>	V	
Power Supply							
Voltage	Vcc	±10%		2.5		V	
Supply Current		V <sub>cc</sub> =2.5V			80	mA	
Stand by Current		V <sub>cc</sub> =2.5V			80	mA	
Control Voltage							
Control Voltage	Vc	V <sub>cc</sub> =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					±100	ppm	
Phase Noise At Vcc=3.3V, 805.664MHz Frequency		1KHz		-107		dBc/Hz	
		10KHz		-117			
		100KHz		-125			
		1MHz		-135			
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					