Dynamic Engineers Inc.
2550 Gray Falls Dr., Suite#128, Houston, TX, 77077 USA
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VCXO7500BL-122.88MHz-A-V
Low Jitter Differential VCXO

Features and Benefits

Frequency: 122.88MHz
Supply voltage: 3.3V
Steady current: 55mA Max.
Output waveform: PECEL
Frequency stability vs. operating temperature: ±25PPM
Pulling range: 50 PPM
Phase noise@100KHz: -127dBc/Hz
Operating temperature: -40°C to 85°C
Size:5x7x1.8mm

Typical Applications

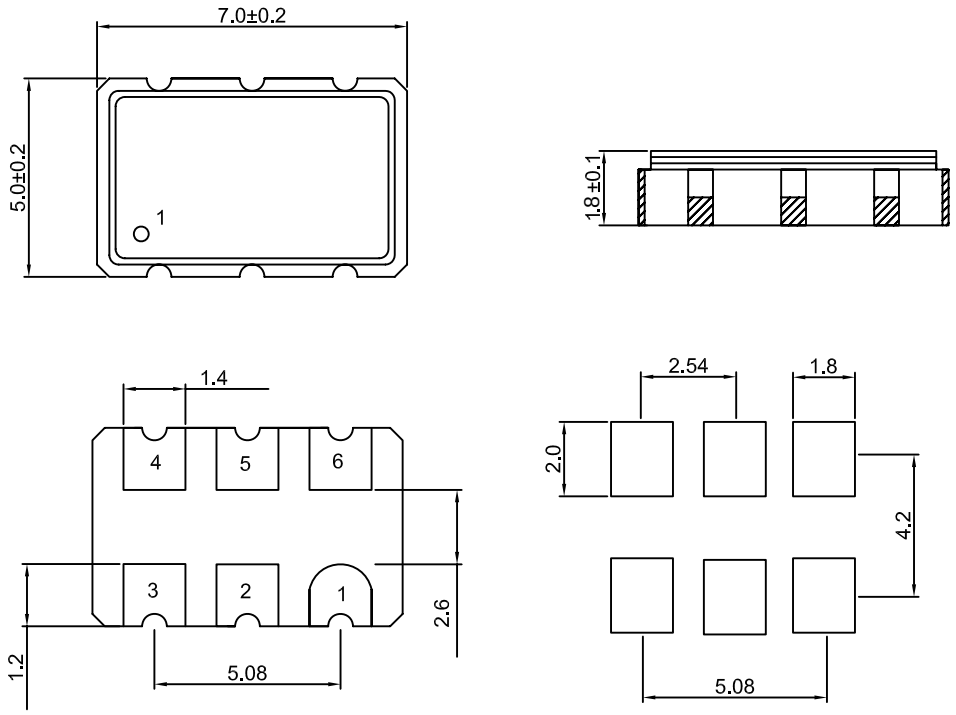
Set-Top Box
HDTV
XDSL/Voip
ADC

Description

VCXO7500BL-122.88MHz-A-V is the high frequency and low jitter differential VCXO.
The current consumption can be less than 55mA. It can be widely used in digital circuit.

Mechanical Drawing & Pin Connections

Drawing No: MD160041-3



Land Pattern

Pin Connection

Pad 1	Control Voltage
Pad 2	OE
Pad 3	Ground
Pad 4	Differential
Pad 5	Complementary
Pad 6	Supply Voltage

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			122.88		MHz	
RF Output							
Output waveform				PECL			
Load			RL=50 Ohm to(V_{DD}-2.0V)				
Output High			V_{DD}-1.03		V_{DD}-0.6	V	
Output Low			V_{DD}-1.85		V_{DD}-1.6	V	
Duty Cycle		±5%		50		%	
Start-up Time					10	ms	
Rise Time/Fall Time		20%-- 80% waveform			0.5	ns	
Output Enable Function							
OE Control on PAD2			70% of V_{DD} (min.) to enable output. (Open connection prohibit)				
			30% of V_{DD} (max.) to disable output.				
Output Enable Time / Disable Time			200 ns. Max. / 50 ns. Max				
Power Supply							
Supply Voltage	V_{DD}	±5%		3.3		V	
Current					55	mA	
Current with Output Disable				16		mA	
Frequency Control							
Control Voltage Range			0.3		3.0	V	
Pulling Range			±50			PPM	
Linearity				±5	±10	%	
Input Impedance				1		MOhm	
Frequency Stability							
Versus Temperature					±25	ppm	
Aging		1st year; 25°C			±5.0	ppm	
Phase Jitter		12KHz – 20MHz,RMS		0.6		ps	
Phase noise		@1 KHz		-114		dBc/Hz	
		@10 KHz		-123			
		@100 KHz		-127			
Environmental Conditions							
Operating temperature range		-40°C to +85°C					