Dynamic Engineers Inc.
2550 Gray Falls Dr., Suite#128, Houston, TX, 77077 USA
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TCXO3225BL-1000MHz-B-V
1000MHz LVDS TCXO

Features and Benefits

Frequency range: 1000MHz
Supply voltage: 3.3V
Steady current: 36mA Typ.
Output waveform: LVDS
Frequency stability vs. operating temperature: ±2ppm
Aging: ±2ppm per year
Phase noise@10KHz: -98dBc
Operating temperature: -40°C to +85°C
Size: 3.2x2.5x1.6mm

Typical Applications

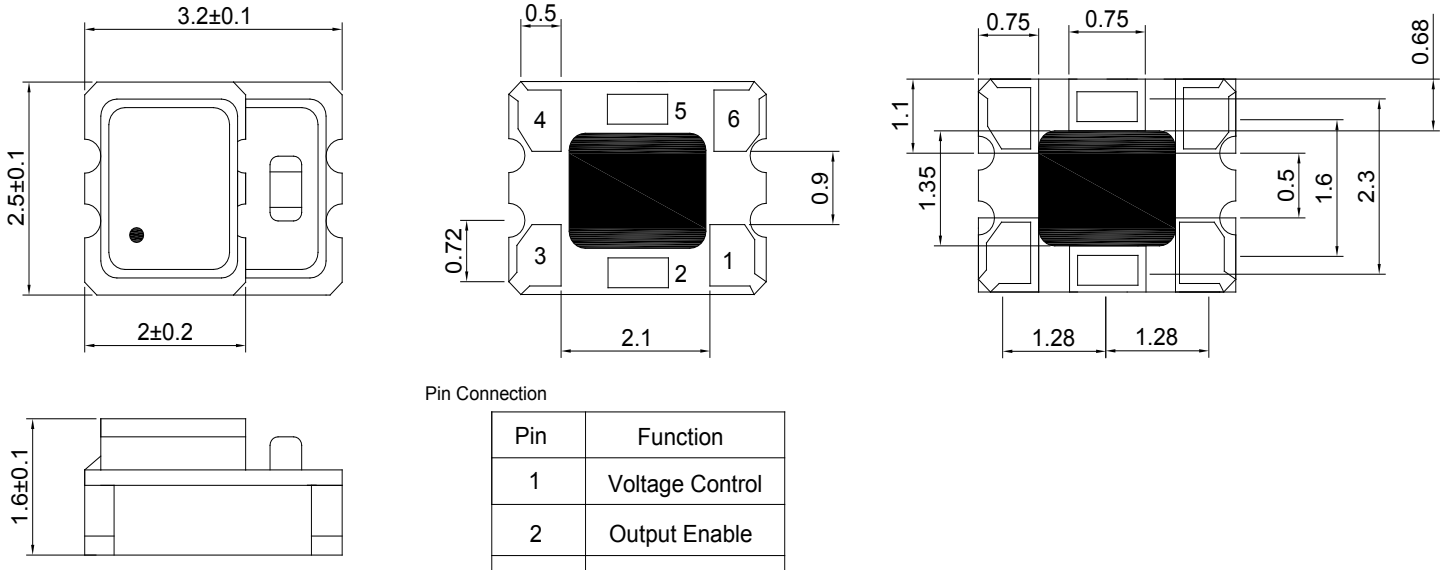
High-Speed Gigabit Ethernet, Fiber
Data Loggers
DSP Clock

Description

TCXO3225BL-1000MHz-B-V is designed for high frequency applications where exceptional frequency stability and timing is required. It has excellent temperature performance and stability. These characteristics make it an excellent choice for high frequency applications.

Mechanical Drawing & Pin Connections

Drawing No: MD160046-1



Pin Connection

Pin	Function
1	Voltage Control
2	Output Enable
3	GND
4	Differential
5	Complementary
6	Vcc

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_{nom}			1000		MHz	
RF Output							
Signal Waveform				LVDS			
Load				100ohm			
H-Level Voltage	V_H			1.4	1.6	V	
L- Level Voltage	V_L		0.9	1.1		V	
Rise and fall time				0.2 nS. (Typical), 0.4 nS. (max.) Tr / Tf: 20% ↔ 80% waveform			
Startup time				5 m sec. (max.)			
Power Supply							
Supply Voltage	V_{cc}	±5%		3.3		V	
Current consumption				36		mA	
Current with output disabled				18		mA	
Frequency Stability							
Versus Operating Temperature Range		-40°C to +85°C		±2.0		ppm	
Versus supply voltage		±5% change			±0.2	ppm	
Versus load		±10% change			±0.2	ppm	
Aging 1st Year					±2.0	ppm	25°C
Aging 10 Year					±10	ppm	25°C
Storage Temperature				-55°C to +150°C			
Phase Noise		1KHz			-91	dBc	
		10KHz			-98	dBc	
Control Voltage Function on Pad 1							
Control Voltage Center and Range				+1.5V ± 1.0V			
Frequency Pulling Range				± 8 ppm min.			
Linearity				± 1 % typical. ± 10% max.			
Output Enable Function on pad 2							
OE Control				70% of Vcc (min.) to enable output (open connection prohibit)			
				30% of Vcc (max) to disable output			
Output Enable Time / Disable Time				200 nS. Max. / 50 nS. Max.			