



Features and Benefits

Frequency range: 1000MHz

Supply voltage: 3.3V

Steady current: 52mA Typ.

Output waveform: PECL

Frequency stability vs. operating temperature: ± 2 ppm

Aging: ± 2 ppm 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

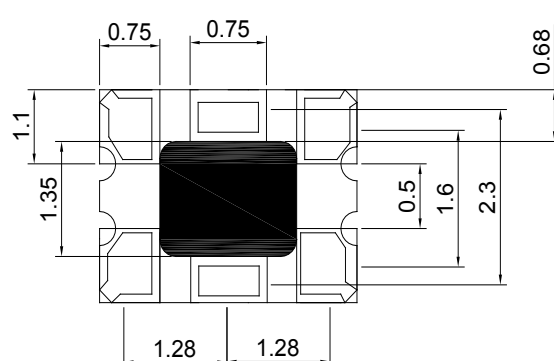
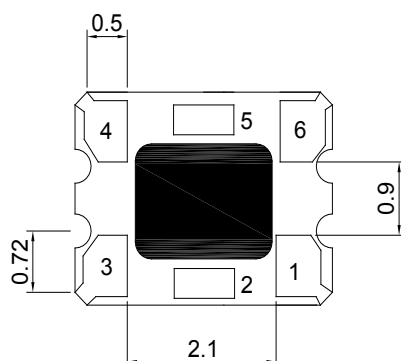
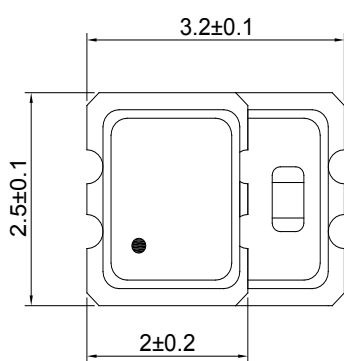
DSP Clock

Description

TCXO3225BL-1000MHz-A-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



Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	F _{nom}			1000		MHz	
RF Output							
Signal Waveform			PECL				
Load			50ohm into Vcc-2V or Thevenin equivalent				
H-Level Voltage	V _H		Vcc-1.03		Vcc-0.6		
L- Level Voltage	V _L		Vcc-1.85		Vcc-1.6		
Rise and fall time			0.2 nS. (Typical) 0.5 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				52		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 1 st 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.				