



Features and Benefits

Frequency range: 1-170MHz

Supply voltage: 3.3V

Steady current: 50mA Max

Output waveform: CMOS

Frequency stability vs. operating temperature: ± 20 ppm

Aging: ± 3.0 ppm per year

Operating temperature: -40°C to $+85^{\circ}\text{C}$

Size: 14x9.6x5.6mm

Typical Applications

Fiber channel

Ethernet

SDH

Serial ATA

SCSI

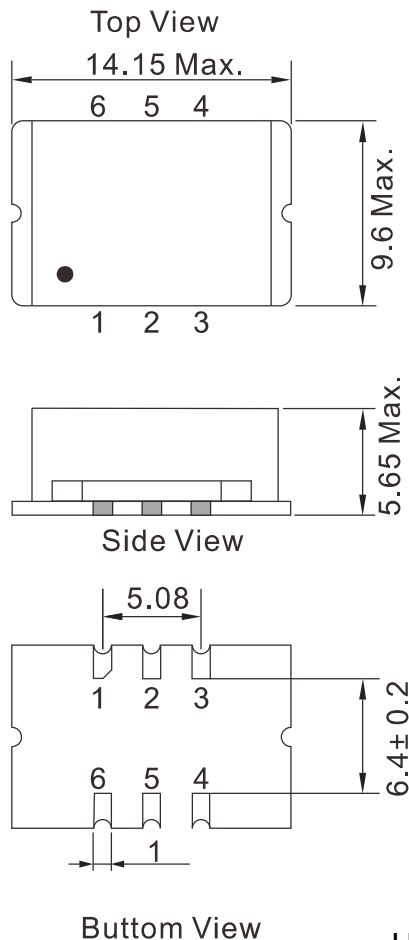
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Description

XO1490AL offers good frequency stability and low phase jitter performance.

Mechanical Drawing & Pin Connections

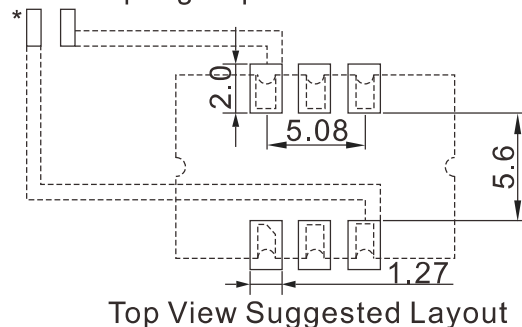
Drawing No: MD230002-1



Pin Connections

Pin No.	Connection
1	OE or NC
2	OE or NC
3	GND
4	Output
5	NC
6	Vcc

* External high frequency power supply decoupling required.



Unit in mm
1mm = 0.0394 inches



Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	F _{nom}		1		170	MHz	
Output				CMOS			
Output load				15		pF	
Duty cycle			40		60	%	
Rise/Fall time					10	nS	
Level	High Level		0.9*V _{cc}			V	
	Low Level				0.1*V _{cc}	V	
Power Supply							
Voltage	V _{cc}		1.8	3.3	5.0	V	
Current					50	mA	
Start up time					10	mS	
Frequency Stability							
Versus Temperature			±20, ±25 or Specify			ppm	
Aging/Year		At +25°C			±3	ppm	
Phase Jitter		12KHz-20MHz			1	pS	
Period Jitter					40	pSec	
Environmental Conditions							
Operating temperature range	-40°C to +85°C						
Storage temperature range	-55°C to +125°C						