



### Features and Benefits

Frequency range: 1500MHz  
Supply voltage: 3.3V  
Steady current: 54mA Max  
Output waveform: LVPECL  
Frequency stability vs. operating temperature: ±2.0PPM  
Operating temperature: -10°C to +70°C  
Size: 3.2x2.5x1.6mm

### Typical Applications

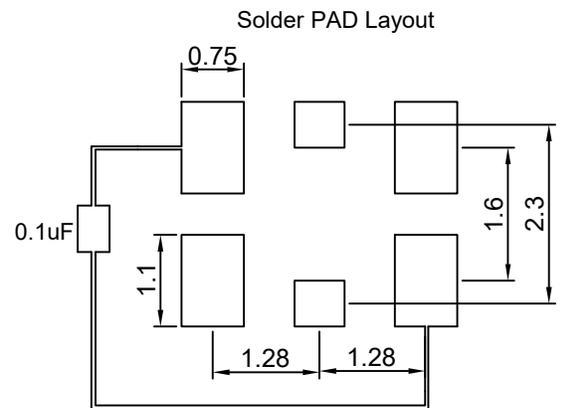
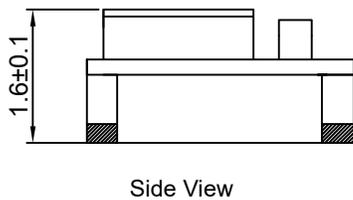
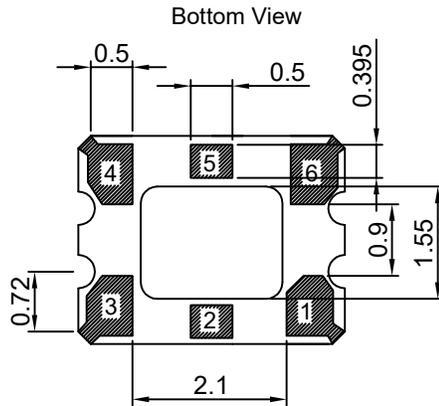
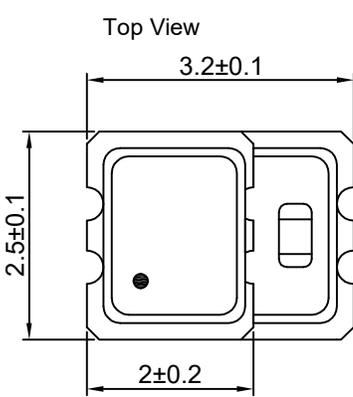
High-Speed Gigabit Ethernet  
Fiber Channel, Storage Area Network, SONET  
Enterprise Server, SAS/SATA  
Microprocessors/DSP/FPGA  
Broadband Access  
Smart Grid

### Description

TCXO3225BM-1500MHz-A is the high frequency LVPECL output TCXO. The frequency stability can less than ±2.0PPM from -10°C to +70°C operating temperature. It can be widely used in the small size portable communication device.

### Mechanical Drawing & Pin Connections

Drawing No: **MD160046-3**



Pin Connection

Pin	Function
1	N.C.
2	Tri-State
3	GND
4	Output
5	Comp. Output
6	VDD

To ensure optimal oscillator performance, place a by-pass capacitor of 0.1µF as close to the part as possible between VDD and GND pads.

Unit in mm  
1mm = 0.0394 inches



**Specifications**

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	F <sub>nom</sub>			1500		MHz	
<b>RF Output</b>							
Signal Waveform			LVPECL				
Load	R <sub>L</sub>		50 ohm into Vdd-2V				
H-Level Voltage	V <sub>H</sub>		Vdd-1.03		Vdd-0.6	V	
L- Level Voltage	V <sub>L</sub>		Vdd-1.85		Vdd-1.6	V	
Duty Cycle			45		55	%	
Rise and fall time		20% to 80%			0.5	nS	
Startup time					5	mS	
Tri-state mode (input to pin2)		Enable	0.7xVdd			V	
		Disable			0.3xVdd	V	
<b>Power Supply</b>							
Supply Voltage	V <sub>dd</sub>	±5%		3.3		V	
Supply Current					54	mA	
Standby Current					20	mA	
<b>Frequency Stability</b>							
Versus Operating Temperature Range		-10°C to +70°C	-2.0		+2.0	ppm	
<b>Environmental, Mechanical Conditions</b>							
Operating temperature range		-10°C to +70°C					