



Features and Benefits

Frequency range: 1-150MHz
Output: CMOS/TTL
Supply voltage: 5.0/3.3V
Current: 60mA Max.
Frequency stability vs. temperature: ±25PPM
Operating temperature: -40°C to +85°C
Size: 5.0x3.2x1.4 mm

Typical Applications

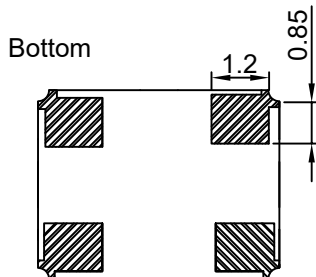
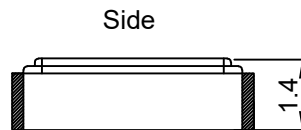
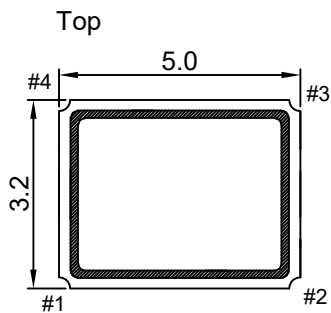
Cellular Base Stations
Instrumentation
Microwave Applications
Radar reference

Description

The XO5300AX01 is designed for applications where exceptional frequency stability and timing is required. It has both excellent temperature performance and short-term stability. These characteristics make it an excellent choice for timing applications.

Mechanical Drawing & Pin Connections

Drawing No: MD2(00(%1



Pin Connections

Pin	Function
1	OE
2	GND
3	RF Output
4	Supply Voltage

Unit in mm
1mm = 0.0394 inches



Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Frequency Range	F _{nom}		1		150	MHz	
RF Output							
Signal Waveform			CMOS/TTL				
Load	R _L	CMOS		15		pF	
		TTL		10		pF	
H-Level Voltage	V _H		90%V _{cc}			V	
L- Level Voltage	V _L				10%V _{cc}	V	
Duty Cycle			40	50	60	%	
Rise/Fall time		10%-90%		8	10	ns	
Output Control		Enable -- High Disable -- Low					
Power Supply							
Supply Voltage	V _{cc}			3.3		V	See ordering information
Start up Time	T _{up}			10		ms	
Current Consumption				45	60	mA	
Frequency Stability							
Versus Operating Temperature Range		Reference to +25°C		±25		ppm	See ordering information
Environmental, Mechanical Conditions							
Operating temperature range	-20°C to +70°C, -40°C to +85°C						

Ordering Information

XO5300AX01	-	10MHz	-	x	x	x	x
Group				01	02	03	04

For example, XO5300AX01-10MHz-1-1-2-2 denotes the XO has the following specifications:

Temperature Range: -20°C to +70°C
 Stability Over Temperature: ±25ppm
 Supply Voltage: 3.3V
 Output Type: TTL

01	Temperature Range
Code	Specification
1	-20°C to +70°C
2	-40°C to +85°C

02	Frequency Stability
Code	Specification
1	±25ppm
2	±50ppm
3	±100ppm

03	Supply Voltage
Code	Specification
1	2.5V
2	3.3V

04	Output Type
Code	Specification
1	HCMOS
2	TTL