



Features and Benefits

Frequency range: 10-170MHz
Supply voltage: 3.3V / 5.0V
Steady current: 40mA Max
Output waveform: HCMOS/TTL
Frequency stability vs. Overall: ±50ppm
Pulling range: ±100ppm
Operating temperature: -40°C to +85°C
Size: 5.0x3.2x1.3mm

Typical Applications

Instrument
Microwave Communication
Test & Measurement
Telecom Systems
Satellite Communication

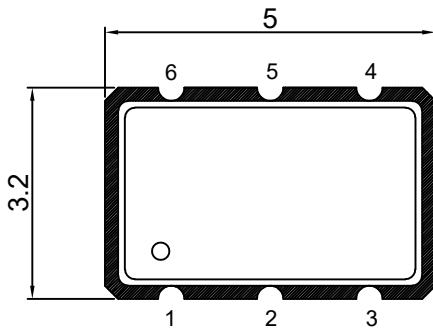
Description

VCXO5300AX offers low noise and high performance, all in a compact package to suit the different communication needs.

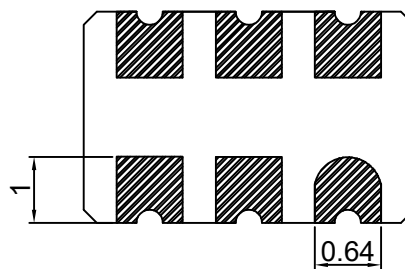
Mechanical Drawing & Pin Connections

Drawing No: MD24002(-1

Top View



Bottom View



Side View



PIN	Function
#1	Control Voltage/N.C.
#2	E/D
#3	GND
#4	Output
#5	N.C.
#6	Supply Voltage

Unit in mm
1mm = 0.0394 inches



Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	F _{nom}		10		170	MHz	
RF Output							
Signal Waveform			HCMOS/TTL				
High Level			90%Vcc			V	
Low Level					10%Vcc	V	
Rise/Fall time					5	ns	
Duty Cycle			45	50	55	%	
Load				15		pF	
Power Supply							
Supply Voltage	V _{cc}		3.13	3.3	3.47	V	
			4.75	5.0	5.25	V	
Current Consumption				15	40	mA	
Output Control		Enable – High, Open Disable - Low	30%Vcc		70%Vcc	V	
Startup time					10	msec	
Frequency Adjustment Range							
Absolute Pulling Range (APR)			±50, ±100			ppm	
Control voltage		3.3V	0.3	1.65	3.3	V	
		5.0V	0.5	2.5	4.5	V	
VC Input Impedance				5		Mohm	
Slope			Positive				
Linearity			±10%				
Frequency Stability							
Frequency stability		Reference to +25°C	±50, ±100			ppm	
Versus Load		5% change			±1	ppm	
Versus Supply		5% change			±1	ppm	
Perturbation		Per 1°C			±3	ppm	
Aging per year					±3	ppm	
Environmental, Mechanical Conditions							
Operating temperature range		-20°C to +70°C or -40°C to +85°C					
Storage temperature range		-45°C to +90°C					