



Features and Benefits

Frequency range: 10-52MHz
Supply voltage: 2.5/3.3V
Current Consumption: 10mA Max
Output waveform: Clipped Sine or CMOS/TTL
Frequency stability vs. operating temperature: ± 0.5 ppm
Aging per year: ± 1.0 ppm Max
Phase noise@1KHz: -130dBc/Hz
Operating temperature: -40°C to +85°C
Size: 2.05x1.65x0.8mm

Typical Applications

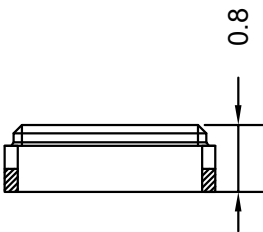
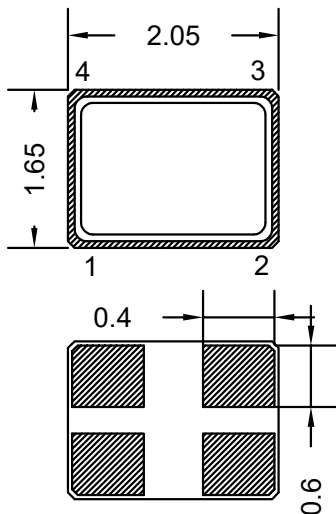
Cellular Base Stations
Instrumentation
Microwave Applications
Radar reference

Description

The TCXO2016AX 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: **MD240035-1**



PIN	Function
#1	Control Voltage/N.C.
#2	GND
#3	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}		10		52	MHz	
RF Output							
Signal Waveform			CMOS/TTL				
Load	R _L			15		pF	
H-Level Voltage	V _H		90%V _{cc}			V	
L- Level Voltage	V _L				10%V _{cc}	V	
Duty Cycle			45	50	55	%	
Rise/Fall time				10		ns	
Power Supply							
Signal Waveform			Clipped Sinewave				
Level			0.8			Vdc	
Load		±10%	10Kohm//10pF				
Supply Voltage	V _{cc}			2.5, 3.3		V	
Start up Time	T _{up}			5		ms	
Current Consumption		Clipped sine					
		10-26MHz			2.0	mA	
		26-52MHz			2.5	mA	
		CMOS/TTL			10	mA	
Frequency Adjustment Range							
Electronic Frequency Control (EFC)			±2 or ±5			ppm	
EFC voltage	V _c		0	V _{cc} /2	V _{cc}	V	
Input Impedance				500		k Ω	
Linearity				10		%	
EFC Slope				positive			
Frequency Stability							
Versus Operating Temperature Range		Reference to +25°C		±0.5,±1, ±2 or ±3		ppm	
Initial Tolerance		+25°C			±2	ppm	
Aging 1 st Year					±1.0	ppm	
SSB Phase noise (26MHz)		10Hz		-80		dBc/Hz	
		100Hz		-110		dBc/Hz	
		1kHz		-130		dBc/Hz	
		10kHz		-145		dBc/Hz	
		100kHz		-150		dBc/Hz	
Environmental, Mechanical Conditions							
Operating temperature range		-20°C to +70°C, -40°C to +85°C					
Moisture Sensitivity Level		1					