Dynamic Engineers Inc.
2550 Gray Falls Dr., Suite#128, Houston, TX, 77077 USA
TEL: 1-281-870-8822 EMAIL: Sales@DynamicEng.com

OCXO3627CO-100MHz-A-V
High Performance Low Profile 100MHz OCXO

Features and Benefits

Frequency range: 100MHz
Supply voltage: 12.0V
Steady Power: 1.5W Max
Output waveform: CMOS
Frequency stability vs. operating temperature: ±100ppb
Aging: ±0.1ppm per year
Phase noise@10KHz: -150dBc/Hz
Operating temperature: -20°C to +70°C
Size: 36x27x15mm

Typical Applications

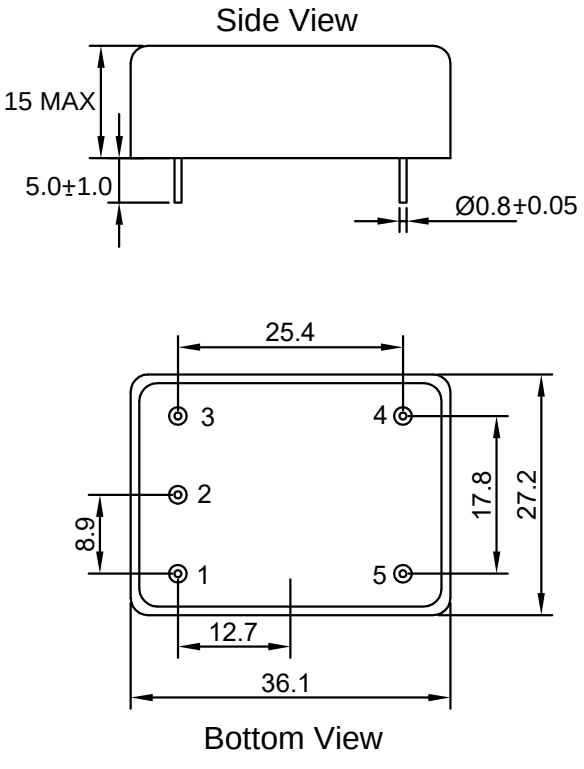
Communication System
Time Synchronization
RF/Microwave System

Description

OCXO3627CO-100MHz-A-V 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: MD240057-1



Pin Connections:

Pin#	Function
1	Control Voltage
2	N.C./Reference Voltage
3	Supply Voltage
4	Output
5	GND

Unit in mm
1mm = 0.0394 inches

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Specifications

Oscillator Specification	Sym	Condition	Value Min.	Value Typ.	Value Max.	Unit	Note
Operational Frequency	F_0			100		MHz	
RF Output							
Signal Waveform				CMOS			
Load	R_L			15		pF	
Output high level			90%Vcc			V	
Output low level					10%Vcc	V	
Duty Cycle			45		55	%	
Rise/Fall Time					10	nS	
Power Supply							
Supply Voltage	Vcc	±5%		12.0		V	
Power Consumption		Steady state @+25°C			1.5	W	
		Warm-up@ turn on			3.6	W	
Frequency Adjustment Range							
Electronic Frequency Control (EFC)			±1			ppm	
Linearity			-10		+10	%	
EFC Slope				positive			
Frequency Stability							
Versus Operating Temperature Range		-20°C to +70°C			±100	ppb	
Initial Tolerance @+25°C		Refer to center Vcon			±0.05	ppm	
Versus supply voltage		±5% change			±3.0	ppb	
Versus load		±5% change			±3.0	ppb	
Warm-up time		< $\pm 10^{-8}$ F_0 Refer to 1 hour after turn on			7	min	
Aging Per Day		Under +25°C after working 30 days			±1.0	ppb	
Aging 1st Year					±0.1	ppm	
SSB Phase noise		10Hz			-90	dBc	
		100Hz			-120	dBc	
		1kHz			-140	dBc	
		10kHz			-150	dBc	
		100kHz			-155	dBc	
Environmental, Mechanical Conditions							
Storage temperature range	-40°C to +100°C						