Dynamic Engineers Inc.
2550 Gray Falls Dr., Suite#128, Houston, TX, 77077 USA
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OCXO2020CO-10MHz-A-V
High Performance 10MHz OCXO

Features and Benefits

Frequency range: 10MHz
Supply voltage: 3.3V
Steady Power: 1.5W Max
Output waveform: Sinewave
Frequency stability vs. operating temperature: ±50ppb
Aging: ±0.1ppm per year
Phase noise@10KHz: -155dBc/Hz
Operating temperature: -20°C to +70°C
Size: 20.5x20.5x10.5mm

Typical Applications

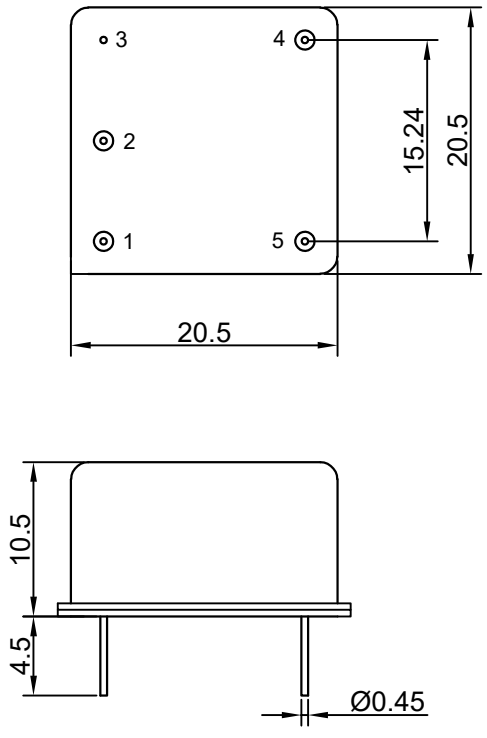
Communication System
Time Synchronization
RF/Microwave System

Description

OCXO2020CO-10MHz-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: MD240040-1



Pin Connections

Pin	Function
1	Supply Voltage
2	RF Out
3	GND
4	Control Voltage
5	Reference voltage/N.C.

Unit in mm
1mm = 0.0394 inches

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Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	F_0			10		MHz	
RF Output							
Signal Waveform				Sinewave			
Output power			+7			dBm	
Power Supply							
Supply Voltage	Vcc	±10%		3.3		V	
Power Consumption		Steady state @+25°C			1.5	W	
		Warm-up@ turn on			3.6	W	
Frequency Adjustment Range							
Control Voltage				1.65		V	±1.5V
Electronic Frequency Control (EFC)			±1			ppm	
Linearity				±10		%	
EFC Slope				positive			
Frequency Stability							
Versus Operating Temperature Range		Refer to +25°C,Vcc±5%			±50	ppb	
Initial Tolerance @+25°C		Refer to center V_c			±0.1	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		1Hz			-85	dBc	
		10Hz			-125	dBc	
		100Hz			-140	dBc	
		1kHz			-145	dBc	
		10kHz			-155	dBc	
Environmental, Mechanical Conditions							
Operating temperature range	-20°C to +70°C						
Storage temperature range	-40°C to +100°C						