Dynamic Engineers Inc.
2550 Gray Falls Dr., Suite#128, Houston, TX, 77077 USA
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OCXO2014BF-10MHz-A-V
Sinewave Output OCXO

Features and Benefits

Frequency range: 10MHz
Supply voltage: 5.0V
Steady current: 200mA Max.
Output waveform: Sinewave
Frequency stability vs. operating temperature: ±50ppb
Aging: ±2ppb/day
Operating temperature: -40°C to +85°C
Size: 20.7x13.1x8.5mm

Typical Applications

Instrument Reference
Microwave Communication
Clock Reference for Microwave Signal Source
Test & Measurement
Telecom Systems

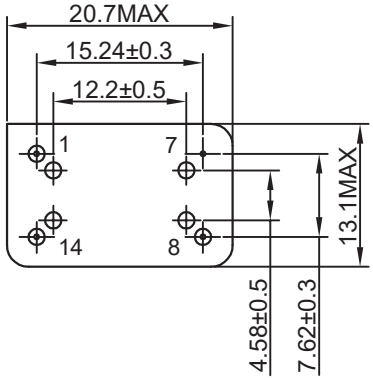
Description

The OCXO2014BF-10MHz-A-V is the 10MHz sinewave output OCXO. The frequency stability vs. temperature can less than ±50PPB and the day aging can be less than ±2PPB. It can be widely used in the communication device to improve the accuracy.

Mechanical Drawing & Pin Connections

Drawing No: MD140072-1

Bottom View

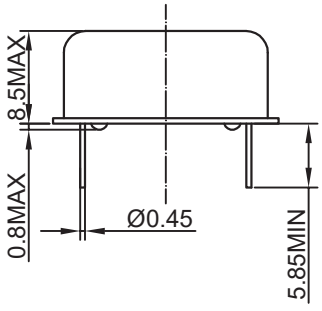


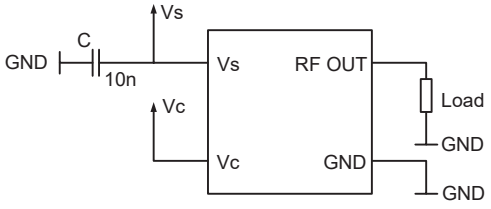
Pin Connections:

PIN #	Symbol	CONNECTION
1	Vc	Control Voltage(EFC)
7	GND	Ground
8	RF OUT	RF Output
14	Vs	Supply Voltage

Unit in mm
1mm = 0.0394 inches

Side View





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Specifications

Oscillator Specification		Sym	Condition	Value			Unit	Note
				Min.	Typ.	Max.		
Operational Frequency		f_0			10		MHz	
Initial Tolerance			V_c@center value			±0.5	ppm	@+25°C
RF Output								
Waveform					Sinewave			
Load		R_L			50		Ohm	
Output Level				+3			dBm	
Harmonic						-25	dBc	
Power Supply								
Voltage		V_{cc}		4.75	5.0	5.25	V	
Power Consumption			Warm-up			500	mA	
			Steady state, @+25°C			200	mA	
Warm-up Time		T_F	@+25°C, $\triangle f_{final}/ f_0 <$ ±0.1 ppm			120	s	
Frequency Control								
Control Voltage Range		V_c		0.25	2.5	4.75	V	
Tuning Range				±1.0			ppm	
Input Impedance				100			Kohm	
EFC Slope			$\triangle f/ \triangle V_c$		Positive			
Frequency Stability								
Versus Temperature			ref 25°C			±50	ppb	
Versus Supply Voltage			±5% change			±10	ppb	
Versus Load			±10% change			±20	ppb	
Aging	Per day		After 30 days of operation			±2.0	ppb	
	First Year					±0.2	ppm	
Environmental Conditions								
Operating Temperature Range			-40°C to +85°C					
Storage Temperature range			-55°C to +125 °C					