



Features and Benefits

Frequency range: 10MHz
Supply voltage: 5.0V
Steady current: 200mA Max.
Output waveform: Sinewave
Frequency stability vs. operating temperature: ± 100 ppb
Aging: ± 10 ppb/day
Operating temperature: -40°C to $+85^{\circ}\text{C}$
Size: 20.7x13.1x8.5mm

Typical Applications

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

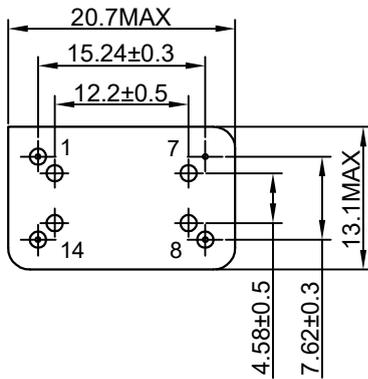
Description

The OCXO2014BF-10MHz-B-V is the 10MHz sinewave output OCXO. The frequency stability vs. temperature can be less than ± 100 PPB and the day aging can be less than ± 10 PPB. It can be widely used in the communication device to improve the accuracy.

Mechanical Drawing & Pin Connections

Drawing No: MD140072-1

Bottom View

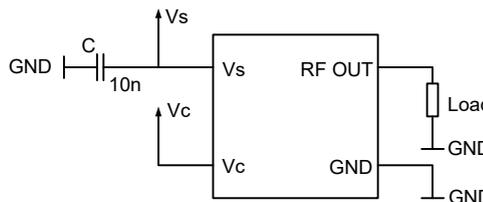
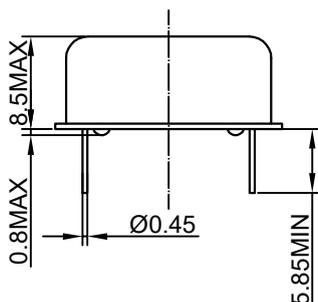


Pin Connections:

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





Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	f_0			10		MHz	
Initial Tolerance	$(f-f_0)/f_0$	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, $\Delta f_{final}/f_0 < \pm 0.1$ 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		$\Delta f / \Delta V_c$	Positive				
Frequency Stability							
Versus Temperature		ref 25°C			± 100	ppb	
Versus Supply Voltage		$\pm 5\%$ change			± 10	ppb	
Versus Load		$\pm 10\%$ change			± 20	ppb	
Aging	Per day	After 30 days of operation			± 10	ppb	
	First Year				± 0.5	ppm	
Environmental Conditions							
Operating Temperature Range		-40°C to +85°C					
Storage Temperature range		-55°C to +125 °C					