



Features and Benefits

Standard frequency: 10.0 MHz
Stability:0.5ppb
Year aging: 30ppb/Year
Power supply: 5 V

Typical Applications

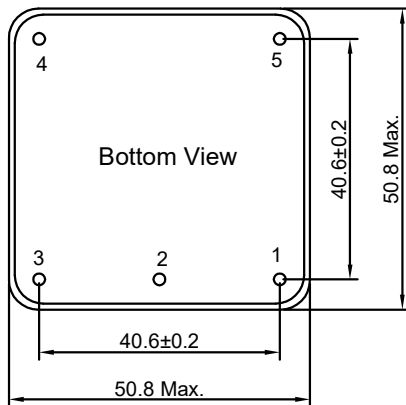
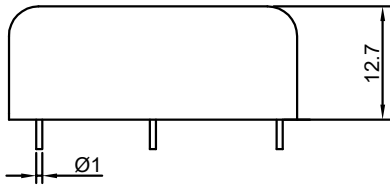
5G
Telecommunication
Test & Measurement

Description

OCXO5152AN-10MHz-A-V offers high frequency stability, low long-term aging and low phase noise, all in a compact package to suit the different communication needs.

Mechanical Drawing & Pin Connections

Drawing No: MD180021-6



Pin Connections:

Pin#	Function
1	Control Voltage
2	Reference Voltage
3	RF Output
4	Ground
5	Supply Voltage

Unit in mm
1mm = 0.0394 inches



Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	F _{nom}			10		MHz	
RF Output							
Signal Waveform			Sinewave				
Load	R _L		50ohm±5%				
Level Voltage	V _H		300			mV	RMS (up to 9±1dBm)
Harmonics					-30	dBc	
Power Supply							
Supply Voltage	V _s	±5%		5		V	
Power Consumption		Steady state, +25°C			500	mA	
		Warm-up			1500	mA	
Warm-up Time	T _{up}	within accuracy of <±2x10 ⁻⁸ @ 25°C			3	min	
Frequency Control							
Frequency pulling range			0.4			ppm	
Control voltage range			0		4.5	V	
With external potentiometer				20		Kohm	
Reference voltage				4.5		V	
Frequency Stability							
Versus Operating Temperature Range		0°C to 50°C			0.5	ppb	
Versus Load					±5x10 ⁻¹⁰		
Versus supply voltage					±5x10 ⁻¹⁰		
Aging		@First year			30	ppb	
Short term stability (Allan deviation)		per 1 sec			5x10 ⁻¹²		
SSB Phase noise		1Hz			-95	dBc	
		10Hz			-125	dBc	
		100Hz			-145	dBc	
		1kHz			-150	dBc	
SSB Phase noise		10kHz			-155	dBc	
Environmental, Mechanical Conditions							
Operating temperature range	0°C to 50°C						
Storage temperature range	-55°C to 85°C						
Vibration	10 to 500Hz						
Acceleration	5g						
Shock	75 g/ 3±1 ms						