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

OCXO5050A-500MH-z-A-V
High frequency Low phase noise 500MHz OCXO

Features and Benefits

Frequency range: 500MHz
Supply voltage: 12V
Steady current: 150mA/Max
Output waveform: Sinewave
Frequency stability vs. operating temperature: ±0.1PPM
Aging: ±0.3PPM per year
Phase noise@10KHz: -140dBc/Hz
Operating temperature: -20°C to +70°C
Size: 50.8x50.8x12.7mm

Typical Applications

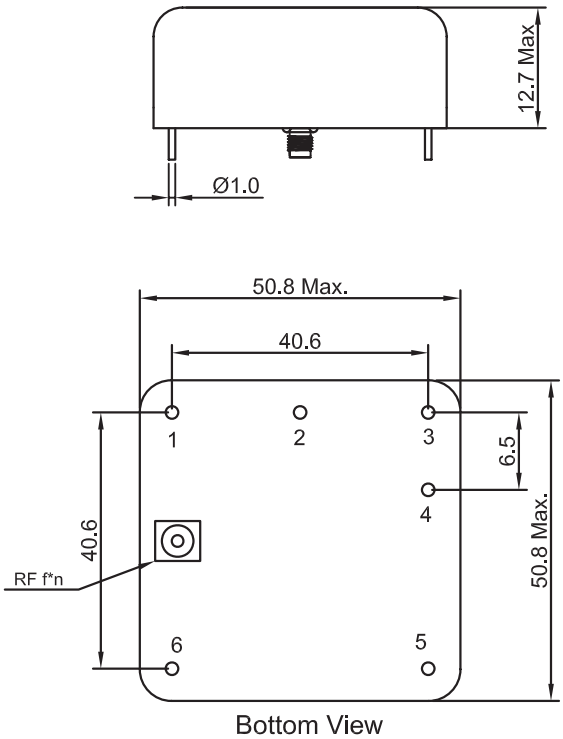
5G
Telecommunication
Test & Measurement

Description

OCXO5050A-500MH-z-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: MD180021-4



Bottom View

Pin Connections:

Pin#	Function
1	Control Voltage
2	Reference Output
3	No Connection
4	Ground
5	Ground
6	Supply Volage

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_{nom}			500		MHz	
RF Output							
Signal Waveform				Sinewave			
Load	R_L			50ohm±10%			
Level		RMS	400			mV	
Harmonics					-25	dBc	-40dBc optional
Power Supply							
Supply Voltage	Vcc	±10%		12		V	
Power Consumption		Steady state, +25°C still air			150	mA	
		Warm-up			450	mA	
Warm-up Time	T_{up}	within accuracy of <±2x10^{-7}@ 25°C			5	min	
Frequency Control							
Frequency pulling range			±3			ppm	
Control voltage range			0		8	V	
Reference voltage				8		V	
Frequency Stability							
Versus Operating Temperature Range					±0.1	ppm	
Versus Load					±50	ppb	
Versus supply voltage					±50	ppb	
Aging per year					±0.3	ppm	
Phase Noise		10Hz			-70	dBc	
		100Hz			-100	dBc	
		1kHz			-125	dBc	
		10kHz			-140	dBc	
Environmental, Mechanical Conditions							
Operating temperature range	-20°C to +70°C						
Storage temperature range	-55°C to +80°C						
Vibration	10 to 500Hz,5g						