



# Dynamic Engineers Inc.

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## 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

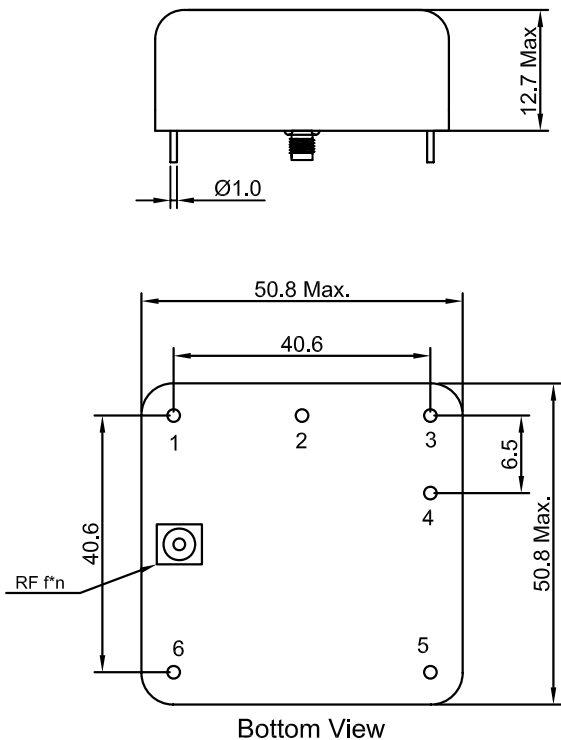
- 5G
- Telecommunication
- Test & Measurement

## 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: MD% \$\$8%{(



### 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



**Specifications**

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	F <sub>nom</sub>			500		MHz	
<b>RF Output</b>							
Signal Waveform			Sinewave				
Load	R <sub>L</sub>		50ohm±10%				
Level		RMS	400			mV	
Harmonics					-25	dBc	-40dBc optional
<b>Power Supply</b>							
Supply Voltage	V <sub>cc</sub>	±10%		12		V	
Power Consumption		Steady state, +25°C still air			150	mA	
		Warm-up			450	mA	
Warm-up Time	T <sub>up</sub>	within accuracy of <±2x10 <sup>-7</sup> @ 25°C			5	min	
<b>Frequency Control</b>							
Frequency pulling range			±3			ppm	
Control voltage range			0		8	V	
Reference voltage				8		V	
<b>Frequency Stability</b>							
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	
<b>Environmental, Mechanical Conditions</b>							
Operating temperature range	-20°C to +70°C						
Storage temperature range	-55°C to +80°C						
Vibration	10 to 500Hz,5g						