

Dynamic Engineers Inc.

2550 Gray Falls Dr., Suite#128, Houston, TX, 77077 TEL: 281-870-8822EMAIL:Sales@DynamicEngineers.com OCXO3307C-100MHz-C-V Very Low Power High Stability Miniature OCXO

Drawing No: MD140076-1

Features and Benefits

Very low power consumption(to 0.18W at +25°C) DIP14 compatible 9.3mm height packaging High frequency stability(up to +/-50 ppb over -40°C to +85°C) Very fast warming-up 60s typical (to 15s optionally)

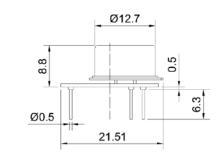
Description

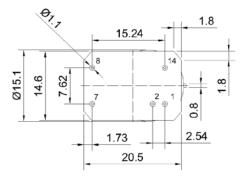
OCXO3307C series offers wide temperature operation from -40°C to +85°C with outstanding frequency stability and low phase noise performance all with very fast warm-up and less than 0.18W power dissipation at 25°C.

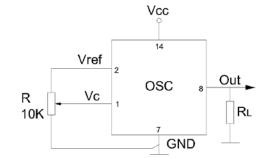
Typical Applications

UHF Synthesizers SATCOM System Portable Microwave Applications

Mechanical Drawing & Pin Connections







Pin	Signal
1	Electrical tuning
2	Reference voltage
7	GND
8	RF Out
14	+V Supply

Unit : mm



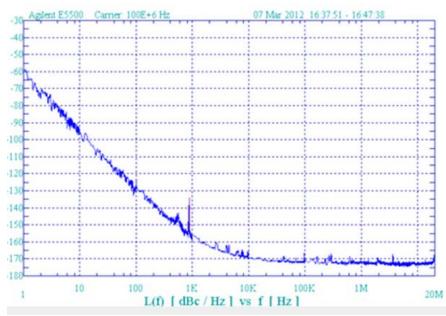
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Specifications

OCXO Specification		Sym Condition	Value			Unit	Note			
		Sym	Condition	Min.	Тур.	Max.	Unit	Note		
Frequency Range		F ₀			100		MHz			
RF Output										
	Level	L		+5	+8		dBm			
Sine wave	Load	RL			50		Ohm			
	Harmonics Level					-25	dBc			
Sub-harmonics Level					None					
Power Supp	bly									
Voltage		Vcc		4.75	5.0	5.25	V			
Rower Cons	Bower Consumption		Steady-state@+25°C		0.18		W			
Power Consumption			Warm-up		1.0		W			
Warm-up Time			To∆f/f=1e-7, at 25°C Ref. to frequency after 15min.			60	s	15s-optional		
Frequency (Control									
Control Voltage		Vc	Vcc=5V	0		4.2	V	Tuning slop-positive		
Tuning Range				+/-0.5	+/-1		ppm			
Reference Voltage		Vref	Vcc=5V	4.1	4.2	4.5	V			
Frequency S										
Vs. Operating Temperature Range			-40°C to +85°C			+/-50	ppb	Ref 25°C		
Vs. Supply Voltage Change			Ref. Vcc typ.		+/-2		ppb			
Vs. Acceleration			Worst direction			+/-1	ppb/G			
Aging	Per Day		After 30 days of			+/-3.0	ppb			
	Per Year		operation			+/-300	ppm			
Phase Noise	e									
Phase Noise			@10Hz		-95					
			@100Hz		-128		dBc/Hz			
			@1 KHz		-155					
			@10 KHz		-170					
Environmer										
			-40°C to +85°C							
Storage Temperature Range			-60°C to +90°C							
Humidity		Non-condensing 95%								
Mechanical Shock			Per MIL-STD-202, 30G half sine pulse, 11ms							
Vibration			Per MIL-STD-202, 10G swept sine 10 to 2000Hz							
Soldering Co	onditions	Hand	Hand solder only – not reflow compatible260°C 10s(on pins)							

Performance Data



Rev.1

Dynamic Engineers reserves the right to make changes to the company datasheet(s) along with other information contained inside; such as data tables and graphs without notification to potential customers who may have earlier revisions in their possession.