

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

Features and Benefits

Frequency range: 10MHz Supply voltage: 5.0V

Steady power consumption: 180mW

Output waveform: HCMOS

Frequency stability vs. operating temperature: ±10ppb

Aging: ±0.05ppm per year

Phase noise@100KHz: -165dBc/Hz Operating temperature: 0°C to +70°C

Size: 21.6x15.3x7.5mm

Typical Applications

Portable Wireless Communications Mobile Test equipment Synthesizers Battery Powered Application

Description

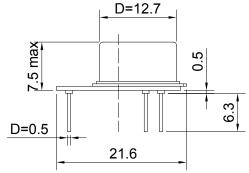
OCXO3306AW-10MHz-A-V offers high frequency stability, low long-term aging and low phase noise, all in a compact package to suit the different communication needs.

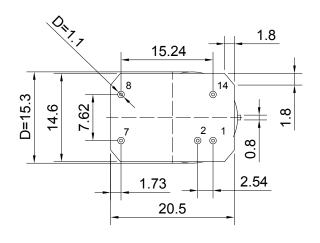
Mechanical Drawing & Pin Connections

Drawing No:

MD140075-3

Physical dimensions





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

Unit in mm 1mm = 0.039 inches



Dynamic Engineers Inc.

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OCXO3306AW-10MHz-A-V ŠĮ ÁŲ[^ kÁP ಔ @ÁÜœaà ặāc ÁT ಔ āæc k ÁU ÔÝU ÁÁ

Specifications

Oscillator	Sym	Condition	Value			Unit	Note	
Specification			Min.	Тур.	Max.	Offic	Note	
Operational Frequency	F _{nom}			10		MHz		
RF Output								
Signal Waveform			HCMOS					
Level	H level		3.7			V		
	L level				0.4	V		
Load				10Kohm// 15pF				
Duty Cycle			45	-,	55	%		
Rise/Fall time					10	nS		
Power Supply				,				
Reference Voltage VREF Output			4.1	4.2	4.3	V		
Supply Voltage	Vs		4.75	5.0	5.25	V		
Warm-up Time	Tup	At +25°C to ∆ f/f=1e-7	30	60		s	ref to freq after 15 min of operation	
Traini ap Tinio		At +25°C to ∆ f/f=1e-8		120		s		
Power Consumption		Steady state, +25°C		180		mW		
Power Consumption		Warm-up			1200	mW		
Frequency Adjustment Range								
Electronic Frequency Control (EFC)		Compliance with 10 years aging	±0.3	±1		ppm		
EFC voltage	V _c		0		4.2	V		
EFC Slope				positive				
Frequency Stability								
Versus Operating Temperature Range		0°C to +70°C		±10		ppb	ref. 25°C, air flow 0.5 m/s max.	
Initial Tolerance @+25°C		V _C @ VREF / 2		±0.1		ppm		
Versus supply voltage	Vs	Ref Vcc typ		±2		ppb		
Aging Per Day		After 30 days of		±0.5		ppb		
Aging 1st Year		operation		±0.05		ppm		
	+	10Hz		-120		dBc		
		100Hz		-145		dBc		
Phase Noise		1kHz		-145		dBc		
Filase Noise		10kHz		-165		dBc		
		100kHz		-165		dBc		
Environmental, Mechanical Conditions		TUUNTIZ		-105		ubc		
Operating temperature range	0°C to +70)°C						
Storage temperature range	-60°C to +85°C							
Airflow velocity	0.5 m/s maximum							
Humidity	Non-condensing 95%							
Mechanical shock	Per MIL-STD-202, 30G half sine pulse, 11ms							
Vibration	Per MIL-STD-202, 30G Hall sine pulse, 11115 Per MIL-STD-202, 10G swept sine 0 to 2000Hz							
Soldering conditions	Hand solder only – not reflow compatible. 260°C 10s (on pins)							
Washing conditions	Washing with water or alcohol-based detergent allowed only with final enough drying stage							
Tradining Conditions	vvasining v	with water or alcohor-bas	ou ucicit	join anowed U	iiy vvilii iiii	ar criougi	arying stage	