

**Features and Benefits**

Low Power (0.55W typ. at 25C typical)  
 Temp. stability less than +/- 50 ppb  
 -40C to 85C operation  
 LVCMOS output  
 3.3V

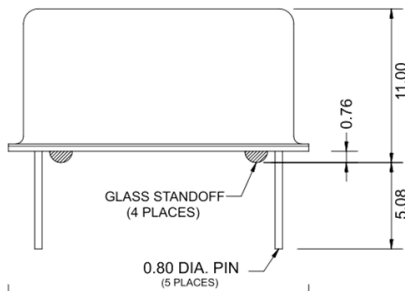
**Typical Applications**

GPS or Beidou Navigation Systems  
 Test Equipment, and synthesizers  
 Communications Systems

**Description**

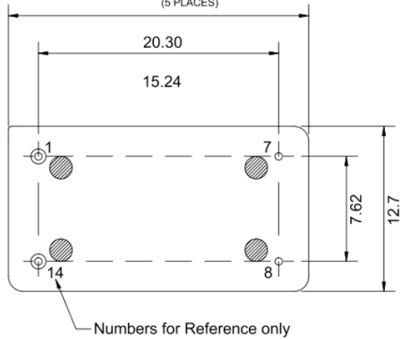
The OCXO2012 ovenized oscillator family is a standard DIP package configuration offering a small OCXO footprint for high performance applications requiring OCXO type stability and phase noise, but in a smaller profile enclosure.

**Mechanical Drawing & Pin Connections**



PIN	FUNCTION
1	Not Connected
7	0 Volts & Case
8	R.F. Output
14	+VDC

Unit = mm



## Specification

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency Range	F <sub>nom</sub>			40.000000		MHz	
LVCMOS	Logic Level 1		+2.4			V	
	Logic Level 0				+0.4	V	
	Rise / Fall Time				6	ns	
	Duty Cycle		45	50	55	%	
<b>Power Supply</b>							
Voltage	V <sub>cc</sub>		3.15	3.30	3.45	V	
Current Consumption		Warm-up			600	mA	
		Steady-state, +25°C		167	242	mA	
Warm-up Time:	T <sub>up</sub>	To within +/- 1e-7, at +25°C			10	min	ref. frequency after 10 min.
<b>Frequency Control*</b>							
Control voltage range		N/A					
Tuning range		N/A					
Reference voltage Output		N/A					
<b>Frequency Stability</b>							
Versus temperature		-40°C to 85°C, ref 25°C	-50.0		+50.0	ppb	
Tolerance at 25°C		After turn on +15 minutes	-500		+500	ppb	
Versus 5% change in supply voltage			-5.0		+5.0	ppb	
Daily Aging		Per Day maximum after 30 days on	-5.0		+5.0	ppb	
First Year Aging			-0.500		+0.500	ppm	
Ten Year Aging			-4.0		+4.0	ppm	
SSB Phase noise (typ.) @ 40 MHz CMOS output and Vcc = 3.3V		10 Hz			-95.0	dBc/Hz	
					-120.0		
					-140.0		
					-145.0		
					-145.0		
Short-Term	Tau = 1 second					E-10	
	100 samples			1.0			
<b>Environmental Conditions</b>							
Operating temperature range		-40°C to 85°C					
Storage temperature range		-55°C to 100°C					
Mechanical Shock		MIL-STD-202, Method 213, Test Condition J ( 30g, 11 milli-secs, half-sine )					
Vibration		MIL-STD-202, Method 201 ( 0.06 inches Total peak-peak, 10 Hz to 55 Hz )					
Humidity		MIL-STD-202, Method 213, Test Condition A ( 95% RH @ +40C, non-condensing, 240 hours )					