

Features and Benefits

Frequency 12.8MHz
 +/-10ppb Max. from -20°C to +70°C
 400mA max. warm-up current
 1.3W max. steady state

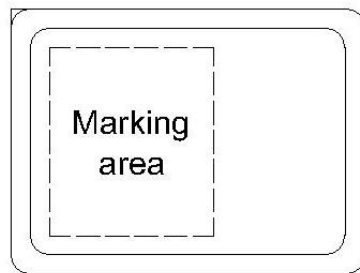
Description

12.8MHz OCXO, +12V supply voltage, +/-10ppb Max. from -20°C to +70°C

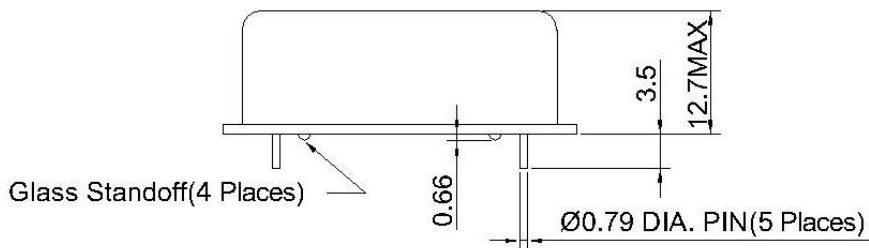
Mechanical Drawing & Pin Connections

Drawing No: MD140061-1

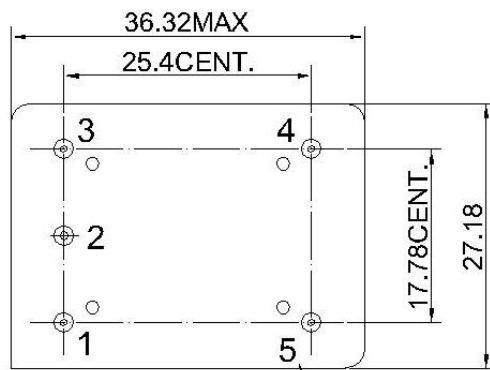
Top View



Side View



Bottom View



Pin Connections:

Pin	Function
1	Vco Input or Not Connected
2	Reference Voltage or Not Connected
3	+VDC
4	R,F. Output
5	0 Volts & Case

Unit : mm

Numbers for Reference only.
 (No stamped on Unit)

Specification

OCXO Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Frequency Range	F ₀			12.800000		MHz	
RF Output							
Output waveform			Rectangular				
Level			HCMOS				
"1" level			+2.6			V	
"0" level					+0.4	V	
Load				15		pF	
Spurious					-60	dBc	
Duty Cycle		@+1.65V	40	50	60	%	
Rise/Fall Time		10% to 90%			5	ns	
Power Supply							
Voltage	V _{cc}		11.400	12.000	12.6000	V	
Current Consumption		Warm-up			400	mA	
		Steady-state@+25°C			1.3	W	
Frequency Control*							
Frequency Adjust Range		VCO@ 0V	-0.8		-0.4	ppm	Tuning Slope: Positive
		VCO@ 5V	+0.4		+0.8		
Control Voltage			0	+2.5	+5	V	
Linearity			-10		+10	%	
Internal resistance			100			Kohm	
Frequency Stability							
Initial Tolerance @+25°C		@+25°C+/-1°C After turn on power 15+/-5minutes	-0.1		+0.1	ppm	<=90 days follow date code VCO input voltage@+2.5+/- 0.001V
Vs. Operating Temperature Range		-20 °C to +70°C Reference +25°C	-10		+10	ppb	
Vs. Supply Voltage Change		+/-5% change	-1		+1	ppb	
Warm-up		In 5minutes@+25°C +/-1°C	-50		+50	ppb	Reference to 1hour
Aging	Daily	After 30 days	-0.5		+0.5	ppb	
	Yearly		-50		+50	ppb	
	10 years		-0.3		+0.3	ppm	
Phase noise		10 Hz			-110	dBc/Hz	
		100 Hz			-125		
		1 KHz			-135		
		10 KHz			-140		
Environmental							
Operating temperature range		-40°C to +85°C					
Storage temperature range		-40°C to +85°C					
Vibration		MIL-STD-202, Method 202. Test condition: 0.06" total p-p, 10 to 55Hz					
Shock		MIL-STD-202, Method 213, Test Condition J. 30g, 11ms, half sine.					