



Features and Benefits

- Small hermetically sealed package
- Tight frequency stability
- Low power consumption
- Fast warm-up time
- Electrical frequency tuning input
- Reference voltage output
- RoHS-compliant (lead-free)

Typical Applications

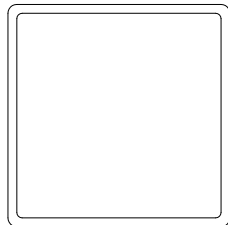
- Instrument Reference
- Microwave Communication
- Clock Reference for Microwave Signal Source
- Test & Measurement
- Telecom Systems
- Radar Systems

Description

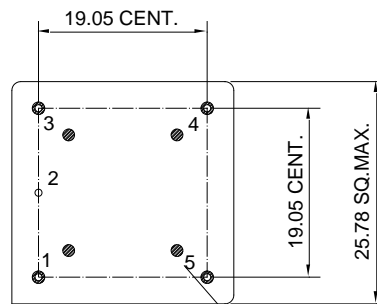
An ultra-low noise 100 MHz ovenized oscillator platform packaged in a globally accepted industry standard 25 x 25 mm hermetic package.

Mechanical Drawing & Pin Connections

Drawing No: MD160042-1

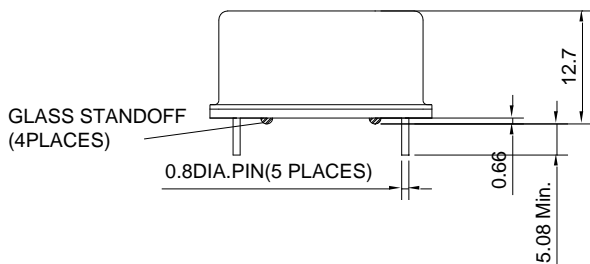


VIEW FROM TOP



VIEW FROM BOTTOM

NUMBERS FOR REFERENCE ONLY
(NOT STAMPED ON UNIT)



Pin	Signal
1	R.F. OUTPUT
2	0 VOLTS&CASE
3	VCO INPUT
4	Not Connected
5	+VDC

Unit in mm
1mm = 0.039 inches



Specifications

OCXO Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Frequency Range	F ₀			100		MHz	
Initial Accuracy		@+25°C±/-1°C After turn on power 60minutes Vco=+5V			+/-0.3	ppm	
RF Output							
Sine Wave	Level	L	+10			dBm	
	Load	RL		50		Ohm	
	Harmonics Level				-30	dBc	
	Spurious				-100	dBc	
Power Supply							
Voltage	Vcc		+11.4	+12	+12.6	V	
Power Consumption		Steady-state@+25°C			2.0	W	
		Warm-up			380	mA	
Reference Voltage(PIN ="Reference Voltage")							
Voltage			+9.5	+10	+10.5	V	
Frequency Control							
Control Voltage	Vc		0	+5	+10	V	Tuning slop- positive
Tuning Range			+/-3			ppm	Ref. to frequency at nominal center voltage
Linearity			-10		+10	%	
Frequency Stability							
Vs. Temperature		-20°C to +70°C Ref. to +25°C		+/-50		ppb	
Vs. Supply Voltage Change		+/-5% change			+/-5	ppb	
Vs. Load Change		+/-10% change			+/-5	ppb	
Warm-up					+/-50	ppb	In 5 min@+25°C ref to 1hour
Short Term		Root Allan Variance for τ =1 sec			0.05	ppb	
G-Sensitivity (each axis)					1	ppb/g	
Aging	Per Day	After 30 days of operation			+/-5	ppb	
	Per Year				+/-500	ppb	
	10 Years				+/-2	ppm	
Phase Noise							
Phase Noise		@10Hz			-93	dBc/Hz	
		@100Hz			-125		
		@1KHz			-157		
		@10KHz			-173		
		@100KHz			-177		
		@1MHz			-180		



Dynamic Engineers Inc.

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

OCXO2525S-100MHz-ULN-4

Low phase-noise OCXO

Environmental		
Parameter	Reference Std.	Test Condition
Operating Temperature Range	-20°C to +70°C	
Storage Temperature Range	-55°C to +105°C	
Humidity	MIL-STD-202, Method 103 Test Condition A,	95% RH @ +40C, non-condensing, 240 hours
Vibration (non-operating)	MIL-STD-202, Method 201,	0.06" Total p-p, 10 to 55 Hz
Shock (non-operating)	MIL-STD-202, Method 213, Test Condition J	30g, 11ms, half-sine