Dynamic Engineers Inc.

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

OCXO2526S-100MHz_series Wda#Š[¸ÁP[ã^BŠ[¸ÁÕËJ^}•ããçãcÁJÔÝUÁÁ

Features and Benefits

100MHz Frequency 5V Supply voltage Sinewave Output waveform ±50ppb Stability Vs -20C --+70C 25.78x25.78x12.7mm Size -162dBc/Hz @1KHz phase noise value

Typical Applications

Instrument Reference
Microwave Communication
Clock Reference for Microwave Signal Source
Test & Measurement
Telecom Systems
Radar Systems
Medical (MRT)

Description

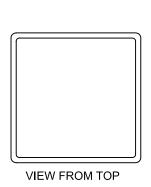
OCXO2526S-100MHz_series is a 100.000 MHz high performance (VC)OCXO offering Ultra Low Phase Noise(ULPN), low G sensitivity(LGS) and tight frequency stability down to ±50ppb (-20°C to +70°C). The part comes in a small hermetically sealed through hole package which makes it suitable for humid environmental conditions.

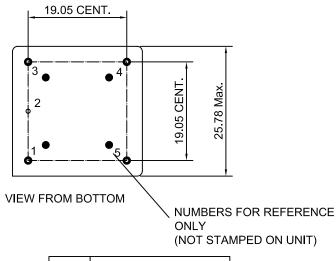
Mechanical Drawing & Pin Connections

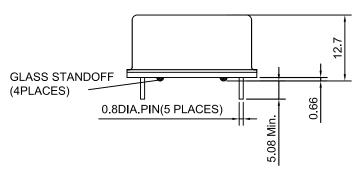
Drawing No:

MD160042-1

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Pin	Signal
1	R.F. OUTPUT
2	GND
3	Control Votage
4	Not Connected
5	Supply Voltage

Unit in mm

1mm = 0.039 inches



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Specifications (Test conditions: VDC = +5 V; VCO = +5 V; at $+25 \pm 3^{\circ}$ C unless otherwise identified)

Oscillator				Value			
Specification	Sym	Condition	Min.	Typ.	Max.	Unit	Note
Operational Frequency	F _{nom}			100		MHz	
RF Output						,	
Signal Waveform				Sine	wave		
Load	RL	±10%		50		ohm	
Level			+15			dBm	
Harmonics			_		-30	dBc	
Spurious					-100	dBc	
Power Supply	,					,	
Supply Voltage	Vs		4.75	5.0	5.25	V	
		@ +25 ±1°C,					
Warm-up Time	T _{up}	referenced to		5		min	Under ±50ppb
·		1 hour					
		Steady state			0.4	14/	
Power Consumption		@+25°C			2.1	W	power
·		Warm-up			950	mΑ	current
Frequency Adjustment Range							
Floatronia Francisco de Control		Refer to Frequency					
Electronic Frequency Control		at nominal center	±2.5			ppm	
(EFC)		voltage					
EFC voltage	Vc		0		10	V	
Center Voltage				5		V	
Linearity			-10		+10	%	
EFC Slope				positive			
Frequency Stability							
Versus Operating		-20°C to +70°C		±50		nnh	See ordering
Temperature Range		-20 C 10 +70 C		±30		ppb	information
Initial Tolerance @+25°C after		Vco=+5V	-0.3		+0.3	nnm	
turn on 30min		VC0=+3V	-0.3		+0.3	ppm	
Versus supply voltage	Vs	±5%change	-5		+5	ppb	
Versus Load		±10%change	-5		+5	ppb	
Aging Per Day				±5		ppb	
Aging 1 st Year				±200		ppb	
Aging 15 th Year				±2		ppm	
Allan Variance		1s			0.05	ppb	
G-Sensitivity (each axis)					1	ppb/G	
				Option	Option		
				Α	В		
	ļ	10Hz		-100	-105	dBc	
SSB Phase noise(Max)	ļ	100Hz		-130	-135	dBc	
CCD I Hadd Holde(Max)	ļ	1kHz		-157	-162	dBc	
	ļ	10kHz		-180	-180	dBc	
	ļ	100kHz		-185	-185	dBc	
		1MHz		-185	-185	dBc	
Environmental, Mechanical Co							
Operating temperature range	See ordering information						
Storage temperature range		to 105°C					
Humidity	MIL-STD-202, Method 103 Test Condition A; 95% RH @ +40°C,non-condensing,240						
	hours						
Shock (non-operating)		L-STD-202, Method 2				ne,11mS	
Vibration (non-operating)	Per M	IL-STD-202, Method 20	J1;0.06" to	tal p-p,10	to 55Hz		

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.

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Ordering Information

OCXO2526S - 100MHz -01 02 03

Group

For example, OCXO2526S-100MHz-1-1-2 denotes the OCXO has the following specifications:

-20°C to +70°C Temperature Range:

Stability Over Temperature: ±100ppb

Phase noise:

01	Temperature Range
Code	Specification
1	-20°C to +70°C
2	-40°C to +85°C

02	Frequency Stability
Code	Specification
1	±100 ppb
2	±50 ppb
3	±500 ppb
4	±200 ppb

03	Phase noise
Code	Specification
1	A
2	В