Dynamic Engineers Inc.
Website: www.DynamicEngineers.com
Email: Inquiry@DynamicEngineers.com

OCXO2525BJ-LN-125MHz-A-V
Low phase noise Low G sensitivity 125MHz
OCXO_Oven Controlled Crystal Oscillator

Features and Benefits

Frequency range: 125MHz
Supply voltage: 12V
Steady current: 150mA/Max
Output waveform: Sinewave
Frequency stability vs. operating temperature: ±50ppb
Aging: 500ppb per year
Phase noise@100KHz: -177dBc/Hz
Operating temperature: -20°C to +70°C
Size: 25.8x25.8x12.7mm
Package type: Through hole

Typical Applications

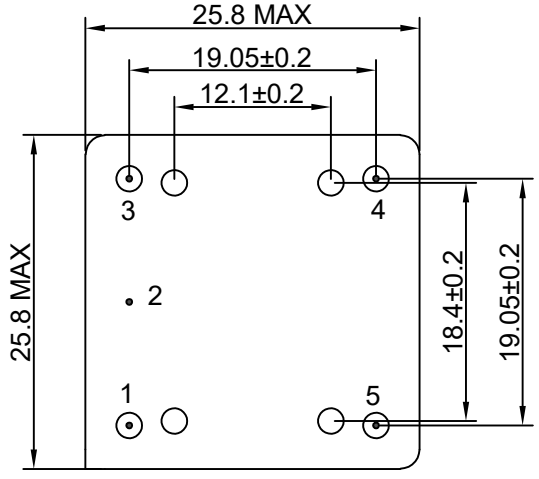
Test & Measurement Equipment
Radar Systems
Instrumentation Reference
Microwave Communication
Clock Reference for
Microwave Signal Source
Synthesizer Reference Clock
Telecom Systems

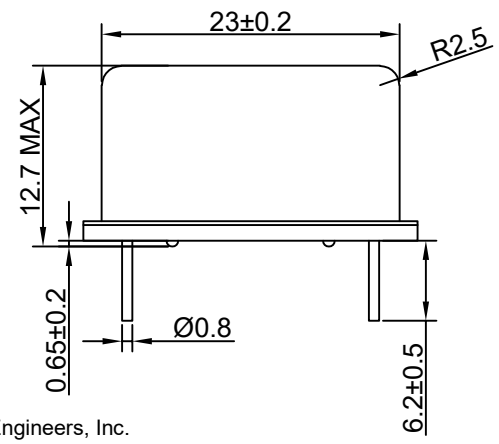
Description

OCXO2525BJ-LN-125MHz-A-V offers a solution for applications with high dynamic phase noise requirements. It has better phase noise performance and good G sensitivity.

Mechanical Drawing & Pin Connections

Drawing No: MD240053-1





Pin Connections

Pin	Function
1	Output
2	GND
3	Control Voltage
4	Reference Voltage
5	Supply Voltage

Unit in mm
1mm = 0.0394 inches

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Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	F_0			125		MHz	
RF Output							
Signal Waveform				Sine wave			
Output Level			+10			dBm	
Load		±5%		50		ohm	
Harmonics level					-30	dBc	
Spurious		10 Hz to 1 KHz from carrier			-80	dBc	
Power Supply							
Supply Voltage	V_{cc}	±5%		12		V	
Reference Voltage	Vref	+5%		10		V	
Warm-up Time	T_{up}	within ± 50 ppb referred to final frequency after 1 hr			5	min	
Power Consumption		Steady state			150	mA	
		Warm-up			350	mA	
Frequency Adjustment Range							
Electronic Frequency Control (EFC)			±3			ppm	
EFC voltage	V_c		0		10	V	
Linearity					10	%	
Slope				Positive			
Frequency Stability							
Versus Operating Temperature Range		-20°C to +70°C			±50	ppb	
Initial Tolerance		after power on for 30 min			±300	ppb	
Versus supply voltage		±5% change			±5	ppb	
Versus load		±5% change			±5	ppb	
G sensitivity		Worst axis			1	ppb/G	
Aging Per Day		After 30 days of continuous operation			±5	ppb	
Aging 1st Year					±500	ppb	
Phase Noise @100 MHz		10Hz		<=-100		dBc	
		100Hz		<=-135		dBc	
		1kHz		<=-162		dBc	
		10kHz		<=-174		dBc	
		100kHz		<=-177		dBc	
Operating temperature range	-20°C to +70°C						
Storage temperature range	-45°C to +90°C						

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