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

TCXO5300BT-LG-24MHz-A
High reliable, High precision 24MHz TCXO

Features and Benefits

Frequency range: 24MHz
Supply voltage: 3.3V
Steady current: 8mA/Max
Output waveform: CMOS
Frequency stability vs. operating temperature: ±0.5ppm
Aging: ±1.0ppm per year
Phase noise@100KHz: -152dBc/Hz
Operating temperature: -40°C to +85°C
Size: 7x3.2x1.7mm

Typical Applications

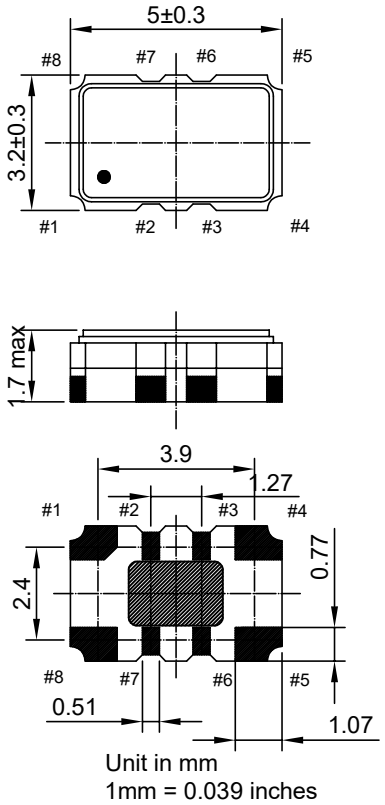
UHF Synthesizers
SATCOM System
Portable Microwave Applications

Description

TCXO5300BT-LG-24MHz-A offers wide temperature operation from -40°C to +85°C with outstanding frequency stability and low phase noise performance.

Mechanical Drawing & Pin Connections

Drawing No: MD240004-1



Pin Function

#1	N.C. or GND
#2	N.C.
#3	N.C.
#4	GND
#5	Output
#6	Tri-state or N.C.
#7	N.C.
#8	Vcc

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Specifications

Oscillator Specification	Sym	Condition	Value Min.	Value Typ.	Value Max.	Unit	Note
Operational Frequency	F_{nom}			24		MHz	
Output				CMOS			
Output Level				V_{OH} > 0.9 x Vcc V_{OL} < 0.1 x Vcc			
Output load					15	pF	
Power Supply							
Voltage	V_{cc}			3.3		V	
Current Consumption					8	mA	
Frequency Control							
Tri-state function			pin #6 high or open pin #5 oscillation pin #6 low or GND pin #5 high impedance				
Frequency Stability							
Vs. temperature		-40°C to +85°C, ref to (fmax+fmin)/2			±0.5	ppm	
Vs. supply voltage changes		±5%			±0.1	ppm	referenced to frequency at nominal supply
Vs. load changes		±5%			±0.1	ppm	referenced to frequency at nominal load
G-sensitivity					0.25	ppb/g	
Tolerance at 25°C			0		+1.0	ppm	
First Year Aging		@+40°C			±1.0	ppm	
Phase noise		10Hz		-83		dBc/Hz	
		100 Hz		-110			
		1000 Hz		-135			
		10 KHz		-148			
		100 KHz		-152			
Environmental Conditions							
Operating temperature range	-40°C to +85°C						
Storage temperature range	-55°C to +105°C						
Reflow Profiles	≤ 260 °C over 10 sec. Max. as per IPC/JEDEC J-STD-020C						
Shock	>20000G						