

## Dynamic Engineers Inc.

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

## **Features and Benefits**

Frequency range: 59.3MHz Supply voltage: 3.3V Current: 7mA Max. Output waveform: CMOS Frequency stability vs. temperature: ±1.0PPM Aging: ±1PPM first year Phase noise: -154dBc/Hz@100KHz: Operating temperature: -40°C to +85°C Size: 5.2x3.4x1.7 mm

### **Typical Applications**

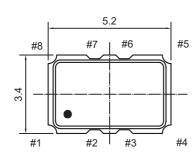
Portable Wireless Communications Mobile Test Equipment Radio SATCOM System

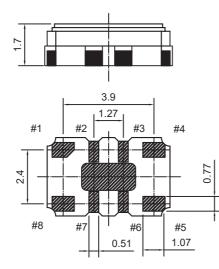
#### **Description**

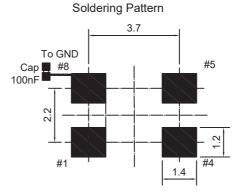
TCXO5300BT-59.3MHz-A is the low phase noise and small size TCXO. It can be widely used in the portable communication devise.

## **Mechanical Drawing & Pin Connections**

#### Drawing No: MD150017-11







#### Pin Function

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

Unit in mm 1mm = 0.0394 inches

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Rev. 1

Dynamic Engineers reserves the right to make changes to the company datasheet(s) along with other information contained inside, such as data tables and araphs without notification to potential customers who may have earlier revisions in their possession.



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# **Specifications**

Oscillator	Dscillator Occurrent Constitution		Value			Unit	Note
Specification	Sym	Condition	Min.	Тур.	Max.		
Operational Frequency	f <sub>0</sub>			59.3		MHz	
RF Output							
Output Waveform			CMOS				
Output Level High			0.9*V <sub>cc</sub>			V	
Output Level Low					0.1*V <sub>cc</sub>	V	
Output Load					15	pF	
Start-up Time					10	ms	
Power Supply							
Voltage	V <sub>cc</sub>	±5%		3.3		V	
Current					7	mA	
Frequency Stability							
Frequency tolerance ex. Factory		@+25°C	0		1.0	ppm	
Vs. Temperature		Reference to (FMAX+FMIN)/2			±1.0	ppm	
Vs. Supply Voltage Changes		±5% Referenced to frequency at nominal supply			±0.2	ppm	
Vs. Load Changes		±5% Referenced to frequency at nominal supply			±0.2	ppm	
Vs. Aging@+40°C		1 <sup>st</sup> year			±1.0	ppm	
G-sensitivity		Per axis			2.0	ppb/g	
Phase Noise		10 Hz		-82			
		100 Hz	100 Hz -105				
		1 KHz		-128		dBc/Hz	
		10 KHz		-145			
		100 KHz		-154			
Environmental Condition	ns 🔄						
Operating temperature rar	ige	-40°C to +85°C					
Storage temperature range	0						
Reflow Profiles as per IPC/JEDEC J-STD-020C		≤260°C over10 sec. Max.					

Note: Unless otherwise specified conditions are @+25 °C