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

TCXO5300BT-HS-10MHz_CS-1312
High Stability and Low Phase Noise TCXO

Features and Benefits

Frequency range: 10MHz
Supply voltage: 2.5V
Current: 7mA Max.
Output waveform: Clipped Sine
Frequency stability vs. temperature: ±0.2PPM
Aging: ±1PPM per year
Phase noise: -152dBc/Hz@100KHz:
Operating temperature: -20°C to +70°C
Size: 5x3.2x1.7 mm

Typical Applications

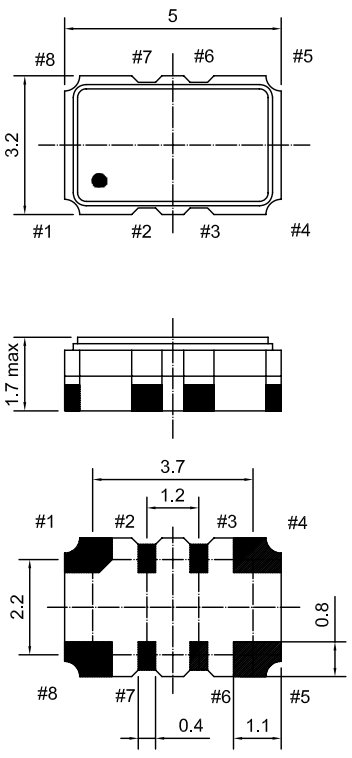
Portable Wireless Communications
Mobile Test Equipment
Radio
SATCOM System

Description

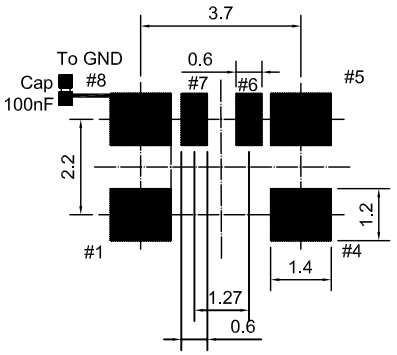
TCXO5300BT-HS-10MHz_CS-1312 is the high stability and low phase noise small size TCXO.
It can be widely used in the portable communication devise.

Mechanical Drawing & Pin Connections

Drawing No: MD150017-8



Footprint



Pin Function

#1	Vc(EFC)*
#2	N.C. or GND
#3	N.C. or GND
#4	GND
#5	Output
#6	Tri-state or N.C.
#7	N.C.
#8	Vcc

*For control voltage version

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			10		MHz	
RF Output							
Output Waveform				Clipped sine			
Output Level			0.8			Vp-p	
Output Load				10K//10pF			
Tri-state function		PIN#6 high or open		Pin#5 oscillation			
		PIN#6 low or GND		Pin#5 high impedance			
Power Supply							
Voltage	V_{cc}	±5%		2.5		V	
Current					7	mA	
Frequency Control							
Control Voltage Range			0.5	1.5	2.5	V	
Tuning Range		Positive slope	±5			ppm	
EFC input impedance			100			Kohm	
Frequency Stability							
Tolerance		@+25ÁC			1.0	ppm	
Versus Temperature Reference to (FMAX+FMIN)/2					±0.2	ppm	
Versus Aging@+40°C		1st year			±1.0	ppm	
G-sensitivity		Per axis			2.0	ppb/g	
Phase noise (typ.)		10 Hz		-83		dBc/Hz	For 40MHz
		100 Hz		-110			
		1 KHz		-135			
		10 KHz		-148			
		100 KHz		-152			
Environmental Conditions							
Operating temperature range		-20°C to +70ÁC					
Storage temperature range		-55°C to +110ÁC					
Reflow Profiles as per IPC/JEDEC J-STD-020C		≤260°C over 10 sec. Max.					

Note: Unless otherwise specified conditions are @+25ÁC