

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: 10MHz Supply voltage: 2.8V Current: 7mA Max. Output waveform: Clipped Sine Frequency stability vs. temperature: ±0.2PPM Aging: ±1PPM per year Phase noise: -152dBc/Hz@100KHz: Operating temperature: -40°C to +85°C Size: 5x3.2x1.7 mm

Typical Applications

Portable Wireless Communications Mobile Test Equipment Radio SATCOM System

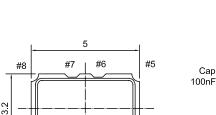
Description

TCXO5300BT-HS-10MHz_CS-2322 is the high stability and low phase noise small size TCXO. It can be widely used in the portable communication devise.

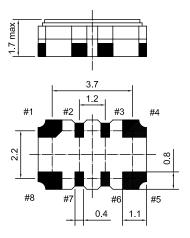
#4

Mechanical Drawing & Pin Connections

#1

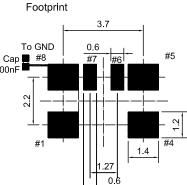


#3



#2

Unit in mm 1mm = 0.0394 inches



Drawing No:

MD150017-8

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

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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 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	Vcc	±5%		2.8		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		@+25°C			1.0	ppm		
Versus Temperature								
Reference to					±0.2	ppm		
(FMAX+FMIN)/2								
Versus Aging@+40°C		1 st year			±1.0	ppm		
G-sensitivity		Per axis			2.0	ppb/g		
Phase noise (typ.)		10 Hz		-83		dBc/Hz		
		100 Hz		-110				
		1 KHz		-135			For 40MHz	
		10 KHz		-148				
		100 KHz		-152				
Environmental Condition	าร							
Operating temperature range		-40°C to +85 °C						
Storage temperature range		-55°C to +110 °C						
Reflow Profiles as per IPC/JEDEC J-STD-020C		≤260°C over 10 sec. Max.						

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