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

TCXO5300BT-25MHz-B-V
5 x 3.2mm SMD TCXO

Features and Benefits

Frequency range: 25MHz
Supply voltage: 3.3V
Current: 2.2mA
Output waveform: CMOS
Frequency stability vs. temperature: ±0.5PPM
Aging: ±1PPM first year
Phase noise: -157dBc/Hz@100KHz:
Operating temperature: -40°C to +85°C
Size: 5x3.2x1.7 mm

Typical Applications

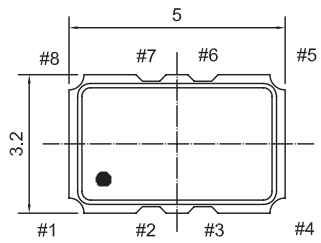
Portable Wireless Communications
Mobile Test Equipment
Radio
SATCOM System

Description

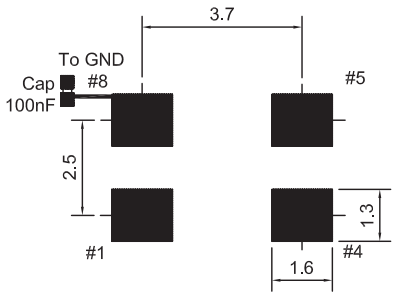
TCXO5300BT-25MHz-B-V is the low phase noise and small size TCXO. It can be widely used in the portable communication devise.

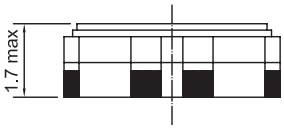
Mechanical Drawing & Pin Connections

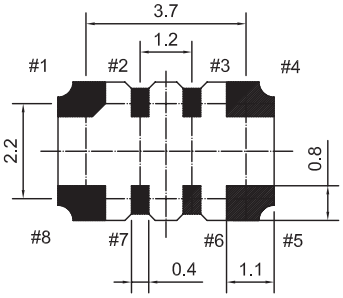
Drawing No: MD150017-10



Solder Pattern







Pin Function

#1	Vc(EFC)
#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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Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	f_0			25		MHz	
RF Output							
Output Waveform				CMOS			
Output Level High			0.9*V_{cc}			V	
Output Level Low					0.1*V_{cc}	V	
Output Load					15	pF	
Power Supply							
Voltage	V_{cc}	±5%		3.3		V	
Current				2.2		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							
Frequency tolerance ex. Factory		@+25°C	0		1.0	ppm	
Vs. Temperature		Reference to (FMAX+FMIN)/2			±0.5	ppm	
Vs. Supply Voltage Changes		±5% Referenced to frequency at nominal supply			±0.1	ppm	
Vs. Load Changes		±5% Referenced to frequency at nominal supply			±0.1	ppm	
Vs. Aging@+40°C		1st year			±1.0	ppm	
G-sensitivity		Per axis			2.0	ppb/g	
Phase Noise		10 Hz		-75		dBc/Hz	
		100 Hz		-110			
		1 KHz		-135			
		10 KHz		-154			
		100 KHz		-157			
Environmental Conditions							
Operating temperature range		-40°C to +85°C					
Storage temperature range		-55°C to +105 °C					
Reflow Profiles as per IPC/JEDEC J-STD-020C		≤260°C over10 sec. Max.					

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