



Features and Benefits

Frequency range: 59.3MHz
Supply voltage: 3.3V
Current: 7mA Max.
Output waveform: Clipped sine
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

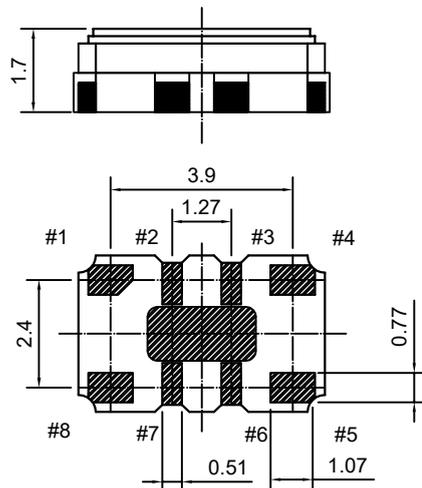
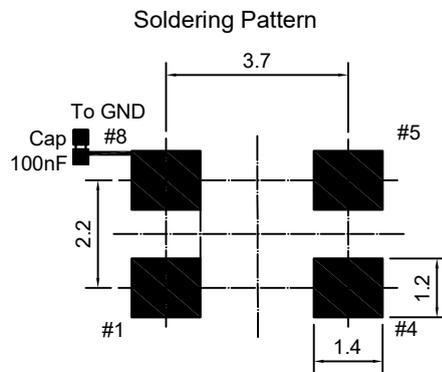
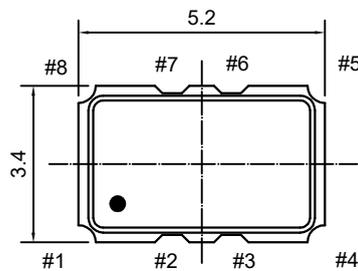
Portable Wireless Communications
Mobile Test Equipment
Radio
SATCOM System

Description

TCXO5300BT-59.3MHz-B 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



Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	f ₀			59.3		MHz	
RF Output							
Output Waveform			Clipped sine				
Output Level			0.8			Vp-p	
Output Load			10Kohm//10pF				
Start-up Time					10	ms	
Power Supply							
Voltage	V _{cc}	±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 st year			±1.0	ppm	
G-sensitivity		Per axis			2.0	ppb/g	
Phase Noise		10 Hz		-82		dBc/Hz	
		100 Hz		-105			
		1 KHz		-128			
		10 KHz		-145			
		100 KHz		-154			
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