



Features and Benefits

Frequency range: 100MHz
Supply voltage: 3.3V
Steady current: 45mA/Max
Output waveform: HCMOS
Frequency stability vs. operating temperature: ± 1.0 ppm
Aging: ± 1.0 ppm per year
Phase noise@100KHz: -170dBc/Hz
Operating temperature: -40°C to +85°C
Size: 11.4x9.6x6.5mm

Typical Applications

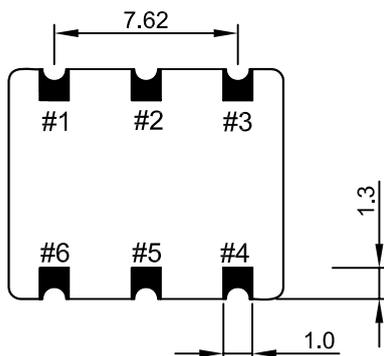
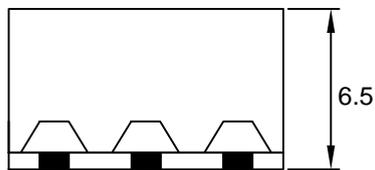
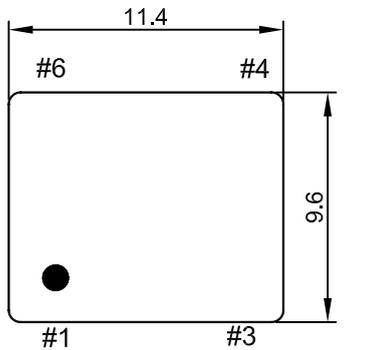
UHF Synthesizers
SATCOM System
Portable Microwave Applications

Description

TCXO911BT-LG-100MHz-A offers wide temperature operation from -40°C to +85°C with outstanding frequency stability and low phase noise performance.

Mechanical Drawing & Pin Connections

Drawing No: MD190005-1



Pin Connection

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

Unit in mm
1mm = 0.0394 inches



Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	F _{nom}			100		MHz	
Output			HCMOS				
Output Level			V _{OH} > 0.9 x V _{CC} V _{OL} < 0.1 x V _{CC}				
Output load					15	pF	
Duty Cycle			45		55	%	
Power Supply							
Voltage	V _{CC}			3.3		V	
Current Consumption		Without load			45	mA	
Frequency Stability							
Vs. temperature		-40°C to +85°C, ref to (f _{max} +f _{min})/2			±1.0	ppm	
Vs. supply voltage changes		±5%			±0.05	ppm	referenced to frequency at nominal supply
Vs. load changes		±10%			±0.05	ppm	referenced to frequency at nominal load
G-sensitivity		Per axis			0.4	ppb/g	
Tolerance at 25°C			0		+1.0	ppm	
First Year Aging		@+40°C			±1.0	ppm	
Short term stability ADEV		1 sec			1x10 ⁻¹⁰		
Phase noise		100 Hz			-105	dBc/Hz	
		1000 Hz			-128		
		10 KHz			-150		
		100 KHz			-170		
		1000KHz			-175		
Environmental Conditions							
Operating temperature range		-40°C to +85°C					