



Features and Benefits

- Frequency range: 100MHz
- Supply voltage: 3.3V
- Steady current: 30mA Max
- Output waveform: Sinewave
- Frequency stability vs. operating temperature: ± 0.5 ppm
- Aging: ± 1.0 ppm per year
- Phase noise@100KHz: -178dBc/Hz
- Operating temperature: -40°C to +85°C
- Size: 14.3x9.3x6.2mm

Typical Applications

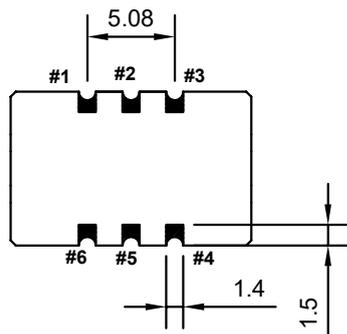
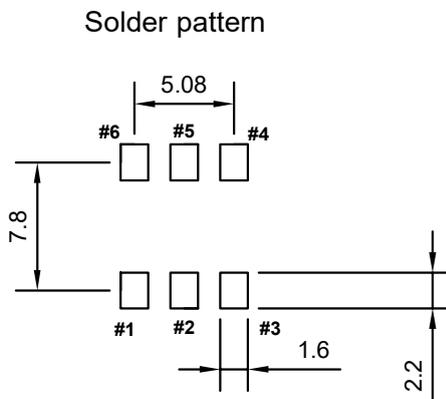
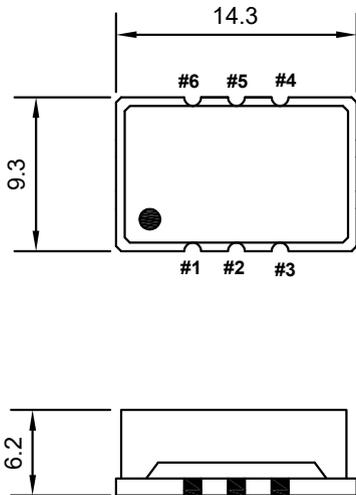
- 5G Repeater
- Link and micro cells
- Low noise microwave

Description

TCXO914BT-100MHz-B 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: MD190003-3



PIN Function

#1	GND or N.C.
#2	N.C. or GND
#3	GND
#4	RF Output
#5	N.C. or GND
#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	
Sinewave	Output Level		4		7	dBm	
	Output Load			50		ohm	
Power Supply							
Voltage	V _{cc}			3.30		V	
Current Consumption					30	mA	
Start-up time					10	mS	
Frequency Stability							
Versus temperature		-40°C to +85°C, ref to (f _{max} +f _{min})/2			±0.5	ppm	
Tolerance at +25°C			0		+1.0	ppm	
Versus ±5% change in supply voltage		Ref to frequency at nominal supply			±0.05	ppm	
Versus ±10% change in load		Ref to frequency at nominal load			±0.05	ppm	
Sub harmonics				-75	-60	dBc	
First Year Aging		@40°C			±1.0	ppm	
G Sensitivity		per axis			0.2	ppb/g	
Phase noise (typ.) @100MHz		10Hz		-78		dBc/Hz	
		100 Hz		-105			
		1000 Hz		-127			
		10 KHz		-150			
		100 KHz		-178			
Short-Term Stability	ADEV	Tau = 1 second			1.0	E-10	
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	≤ 245 °C over 10 s max.						