



### Features and Benefits

- Frequency range: 26MHz
- Supply voltage: 3.3V
- Steady current: 4mA Max
- Output waveform: (LV)CMOS
- Frequency stability vs. operating temperature: ±0.2ppm
- Aging: ±0.8ppm per year
- Phase noise@100KHz: -156dBc/Hz
- Operating temperature: -40°C to +85°C
- Size: 7x5x1.75mm

### Typical Applications

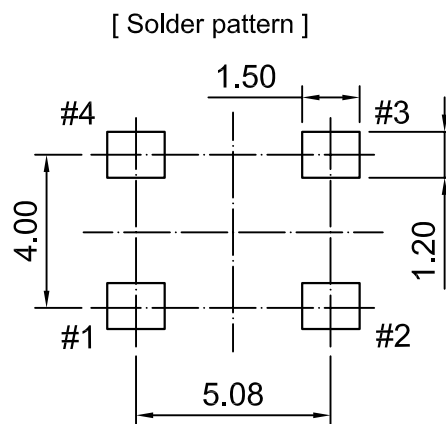
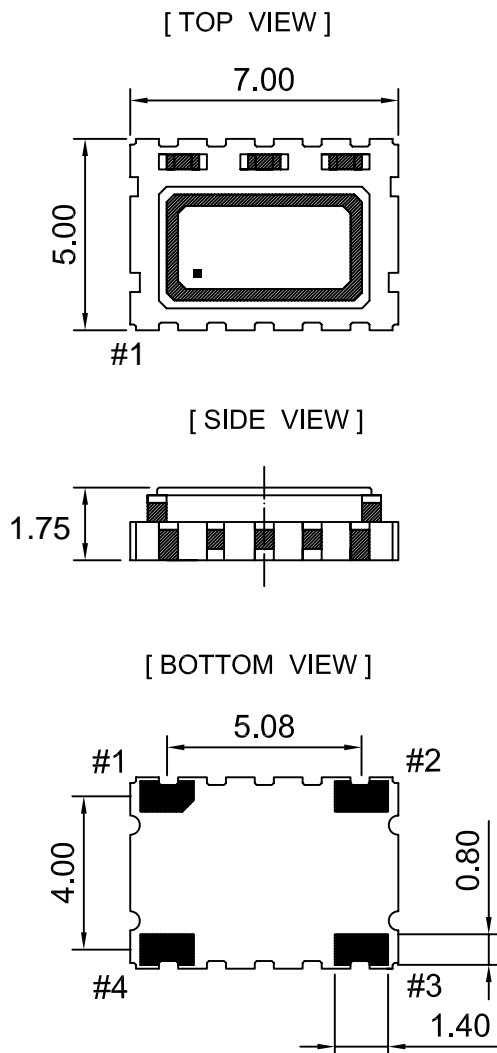
- UHF Synthesizers
- SATCOM System
- Portable Microwave Applications

### Description

TCXO7500BT-26MHz-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: A8% \$\$\$(!+



PIN	FUNCTION
#1	GND or N.C.
#2	GND
#3	RF output
#4	Vdc

Unit in mm  
1mm = 0.0394 inches



**Specifications**

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	F <sub>nom</sub>			26		MHz	
Output			(LV)CMOS				
Output Level			V <sub>OH</sub> ≥ 0.9 x V <sub>CC</sub> V <sub>OL</sub> ≤ 0.1 x V <sub>CC</sub>				
Output load			1kΩ // 15 pF				
<b>Power Supply</b>							
Voltage	V <sub>CC</sub>	±5%		3.30		V	
Current Consumption					4	mA	
<b>Frequency Stability</b>							
Vs temperature		-40°C to 85°C, ref to (f <sub>max</sub> +f <sub>min</sub> )/2			±0.2	ppm	
Vs supply voltage changes		±5%, referenced to frequency at nominal supply			±0.1	ppm	
Vs load changes		±5%, referenced to frequency at nominal load			±0.1	ppm	
Tolerance at 25°C			0		+1.0	ppm	
First Year Aging		@+40°C			±0.8	ppm	
G-sensitivity		per axis		2.0		ppb/G	
Phase noise (typical value for 26 MHz)		10 Hz		-90		dBc/Hz	
		100 Hz		-115			
		1000 Hz		-137			
		10 KHz		-154			
		100 KHz		-156			
		1000 KHz		-157			
<b>Environmental Conditions</b>							
Operating temperature range	-40°C to +85°C						
Storage temperature range	-55°C to +105°C						
Reflow Profiles	≤ 260 °C over 10 sec. Max. as per IPC/JEDEC J-STD-020C						
Moisture sensitivity	Level 1 (unlimited)						