



Features and Benefits

- Frequency range: 20MHz
- Supply voltage: 3.3V
- Steady current: 6mA Max
- Output waveform: HCMOS
- Frequency stability vs. operating temperature: ± 2.5 ppm
- Aging: ± 1.0 ppm per year
- Phase noise@1KHz: -130dBc/Hz
- Operating temperature: -30°C to +85°C
- Size: 5.0x3.2x1.5mm

Typical Applications

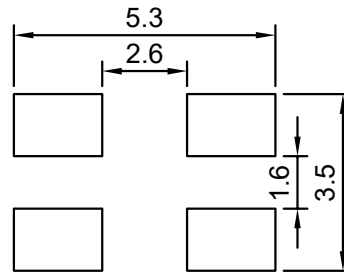
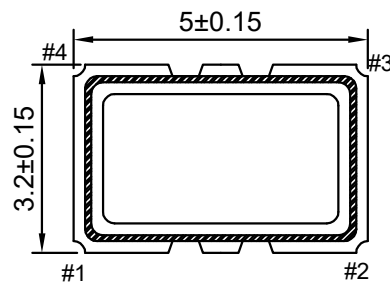
Indoor Positioning System

Description

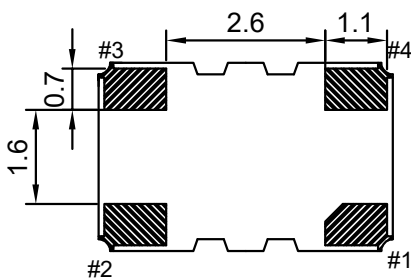
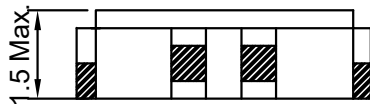
TCXO5032AT-20MHz-A offers wide temperature operation from -30°C to +85°C with outstanding frequency stability and low phase noise performance.

Mechanical Drawing & Pin Connections

Drawing No: MD220005-1



Recommended Land Pattern



PIN	FUNCTION
#1	N.C.
#2	GND
#3	RF output
#4	Supply voltage

Unit in mm
1mm = 0.0394 inches



Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	F _{nom}			20		MHz	
Output			HCMOS				
Output High Level			2.64			V	
Output Low Level					0.50	V	
Output load			15 pF				
Duty Cycle (50% Vcc)			40		60	%	
Rise/Fall					10	ns	
Start-up time					2	ms	
Power Supply							
Voltage	V _{cc}			3.3		V	
Current Consumption					6	mA	
Frequency Stability							
Total Stability		@25°C			±1.0	ppm	
Vs temperature		-30°C to +85°C			±2.5	ppm	
Vs supply voltage changes		±5%			±0.3	ppm	
Vs load changes					±0.3	ppm	
Vs after reflow					±1.0	ppm	
First Year Aging					±1.0	ppm	
Phase noise		1 KHz			-130	dBc/Hz	
Environmental Conditions							
Operating temperature range			-30°C to +85°C				
Storage temperature range			-40°C to +85°C				