



Features and Benefits

- Surface mount package
- 4 pad 7x5x1.85mm
- Optional voltage control function
- RoHS Compliant
- Lead Free construction

Typical Applications

- UHF Synthesizers
- SATCOM System
- Portable Microwave Applications

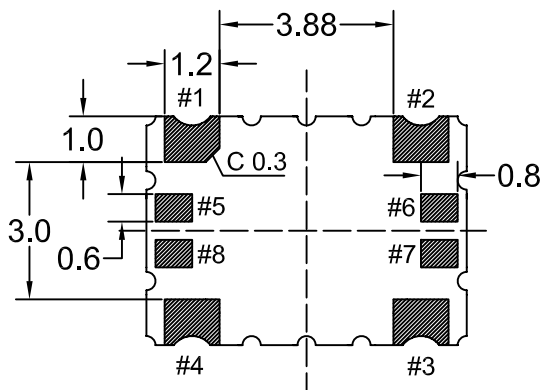
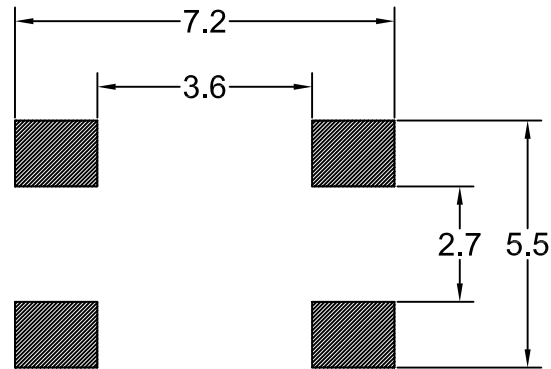
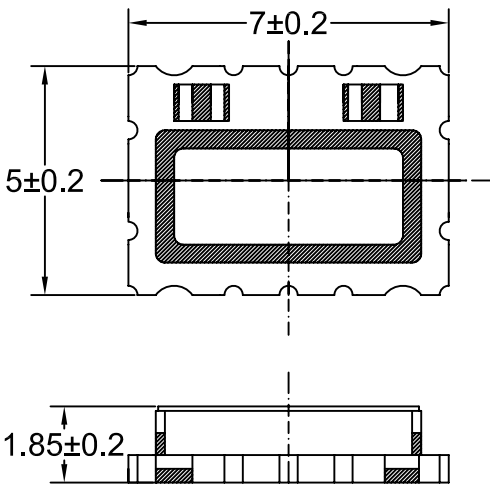


TCXO7500AP_series offers wide temperature operation from -40°C to +85°C with outstanding frequency stability.

Mechanical Drawing & Pin Connections

Drawing No: MD180006-1

Solder pattern



Pin Function

- #1 Vc or NC
- #2 GND
- #3 Output
- #4 Supply Voltage

Do not connect #5, #6, #7, #8

Unit in mm
1mm = 0.0394 inches



Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max		
Operational Frequency Range	F_{nom}		10		52	MHz	
Standard Frequency			10,16.384,19.2,20,25			MHz	
CMOS	Output Level		CMOS				
	Output Load		15			pF	
	Duty Cycle		40		60	%	
Clipped Sine	Output Level		0.8Vp-p				
	Output Load		10kohm//10pF				
Power Supply							
Voltage	V_{cc}		2.7		5.5	V	
Current Consumption					8.5	mA	For CMOS output
					3.5	mA	For Clipped sine
Frequency Control*							
Control voltage range	V_c			1.5±1.0;1.65±1.0;2.5±1.0		V	
Tuning range			±3			ppm	Tuning Slope Positive
Frequency Stability							
Versus ±5% change in supply voltage					±0.3	ppm	
Versus ±10% change in load		Ref to frequency at nominal load			±0.3	ppm	
First Year Aging					±1.0	ppm	
Versus Reflow		1 reflow			±1.0	ppm	
Phase noise (typ.) @20MHz		1000 Hz			-135	dBc	
Environmental Conditions							
Storage temperature range	-40°C to 85°C						

Frequency Stability vs. Temperature

	±0.05PPM	±0.1PPM	±0.2PPM	±0.5PPM	±1.0PPM	±2.0PPM
0°C to +50°C	Available	Available	Available	Available	Available	Available
-10°C to +60°C	Conditional	Available	Available	Available	Available	Available
-20°C to +70°C	Not Available	Conditional	Available	Available	Available	Available
-30°C to +75°C	Not Available	Conditional	Available	Available	Available	Available
-40°C to +85°C	Not Available	Conditional	Available	Available	Available	Available