



# Dynamic Engineers Inc.

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**TCXO7500AP-20MHz-A-V**

7x5x1.8mm SMD TCXO

## Features and Benefits

Surface mount package  
4 pad 7x5x1.8mm  
RoHS Compliant  
Lead Free construction

## Typical Applications

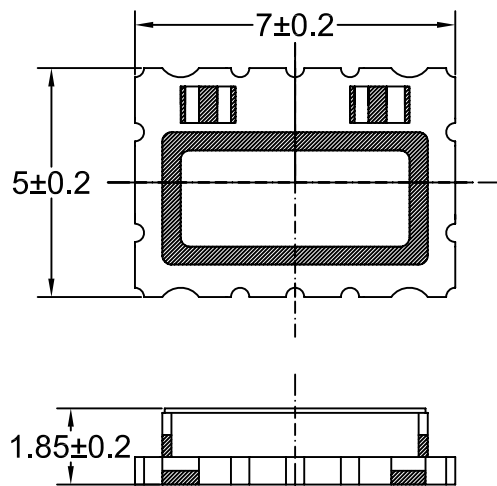
UHF Synthesizers  
SATCOM System  
Portable Microwave Applications

## Description

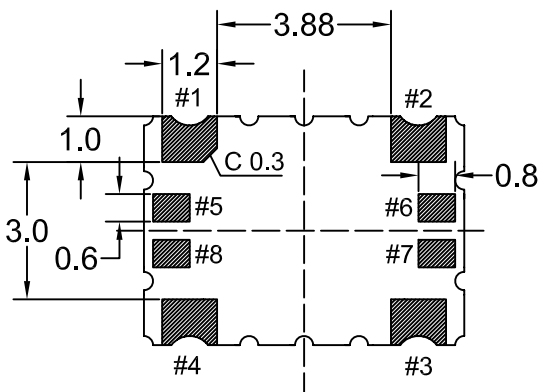
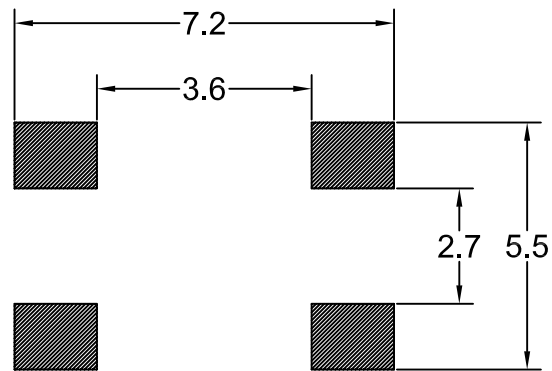
TCXO7500AP-20MHz-A-V offers wide temperature operation from -40°C to +85°C with outstanding frequency stability.

## Mechanical Drawing & Pin Connections

**Drawing No: MD140076-2**



Solder pattern



### Pin Function

- #1 GND
- #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		F <sub>nom</sub>			20		MHz	
CMOS	Output Level			CMOS				
	Output Load		±5%		15		pF	
	Duty Cycle		at 1/2VDD level	40		60	%	
	Rise and fall times		10% to 90%VDD max			5	nS	
	"0" level(VOL)				10%VDD max			
	"1" level(VOH)				90%VDD min			
<b>Power Supply</b>								
Input voltage					+2.5V to +3.3V DC(VDD±5%)		V	
Current Consumption						8.5	mA	
Start-up time						10	mS	
<b>Frequency Stability</b>								
Tolerance			@25°C			±1	ppm	
Versus temp			Referred to +25°C over -40°C to 85°C		±1.0		ppm	
Versus ±5% change in supply voltage					±0.3		ppm	
Versus ±10% change in load			At CL=15pF ±10%		±0.3		ppm	
First Year Aging			@25°C			±1.0	ppm	
<b>Environmental Conditions</b>								
Storage temperature range			-40°C to 85°C					
Power supply voltage			-0.6V to +4.6V					
Operating temperature			-40°C to 85°C					
Reflow soldering condition			+250°C ±10°C for 10 seconds, +170°C ±10°C for 1 to 2 minutes(pre-heating)					