Dynamic Engineers Inc.

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TCXO5300AP_series
5x3.2x1.8mm SMD TCXO

Features and Benefits

Surface mount package
4 pad 5x3.2x1.8mm
Optional voltage control function
RoHS Compliant
Lead Free construction

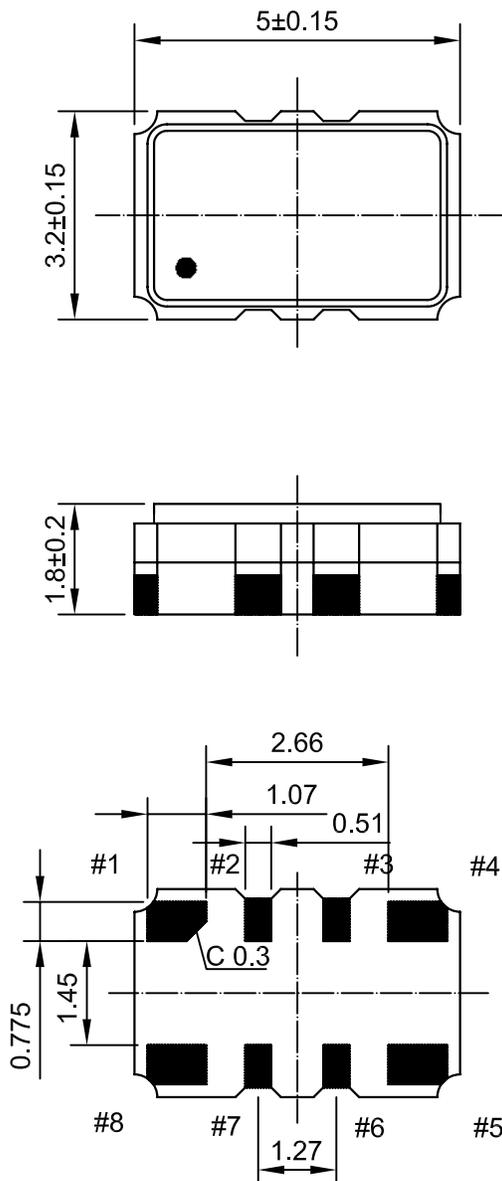## Typical Applications

UHF Synthesizers
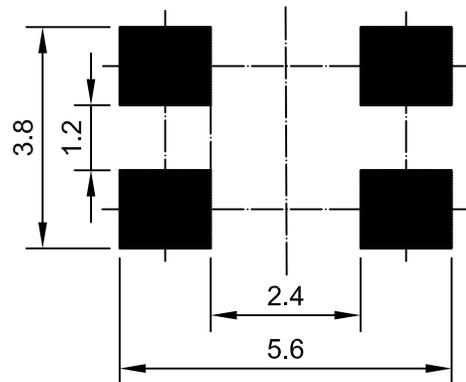SATCOM System
Portable Microwave Applications

Description

TCXO5300AP_series offers wide temperature operation from   -40°C to +85°C with outstanding frequency stability.

Mechanical Drawing & Pin Connections

Drawing No: MD150017-6

Land Pattern

Pin Function

#1	VC or NC
#4	GND
#5	Output
#8	Vdc

Do not connect:#2, #3, #6 &#7

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