



Features and Benefits

- 10MHz Frequency
- 3.3V Supply voltage
- Clipped sinewave Output waveform
- ±0.1ppm Stability Vs -40C ---+85C
- 5x3.2mm Size
- 135dBc/Hz @1KHz phase noise value

Typical Applications

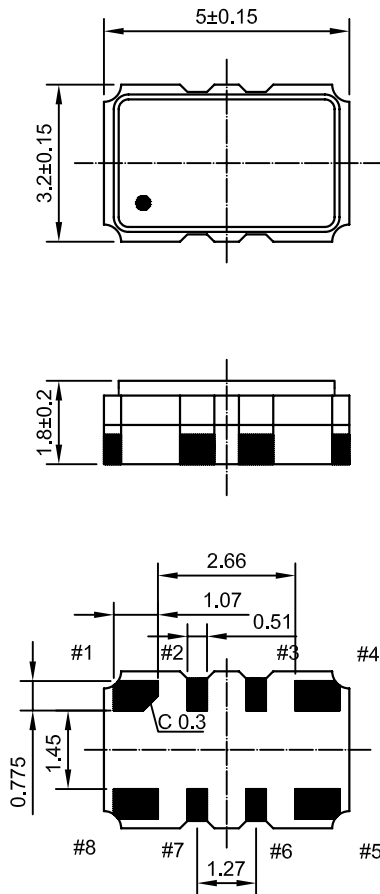
- SATCOM System
- Cellular Base Stations
- Radar Applications

Description

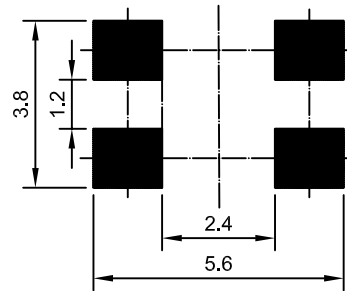
TCXO5300AP-10MHz-A-V are designed for applications where exceptional frequency stability and timing is required. It has both excellent temperature performance and short-term stability. These characteristics make it an excellent choice for timing applications.

Mechanical Drawing & Pin Connections

Drawing No: MD1) \$\$\$+!*



Land Pattern



Pin Function

#1	VC
#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	F _{nom}			10		MHz	
RF Output							
Signal Waveform			Clipped sinewave				DC Coupled
Load	R _L	±10%	10pf//10kohm				
Level Voltage			0.8Vp-p			V	
Power Supply							
Supply Voltage	V _s	±5%		3.3		V	
Current					3.5	mA	
Frequency Adjustment Range							
Electronic Frequency Control (EFC)		Vcon = +1.65V +1.0V DC	±5		±10	ppm	positive
EFC voltage	V _c	±1.0V		1.65		V	
Frequency Stability							
Versus Operating Temperature Range		-40C --+85C		±0.1		ppm	Refer to +25°C
Frequency Tolerance		at +25°C ±2°C and Vcon = 1/2Vdd			±1.0	ppm	
Versus supply voltage	V _s	±5% change		±0.3		ppm	
Versus load		10 kΩ±10% with 10 pF ±10%		±0.3		ppm	
Aging 1 st Year		+25°C ±2°C			±1.0	ppm	
SSB Phase noise		1kHz		-135		dBc	
Environmental, Mechanical Conditions							
Operating temperature range	-40°C to +85°C						
Storage temperature range	-40°C to +85°C						
Power supply voltage	-0.6V to +4.6V (Absolute Maximum Ratings)						
Reflow soldering condition	+250°C ±10°C for 10 seconds; +170°C ±10°C for 1 to 2 minutes(pre-heating)						