



Dynamic Engineers Inc.

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TCXO7500S-25.6MHz-B-V

High Performance SMD TCXO

Features and Benefits

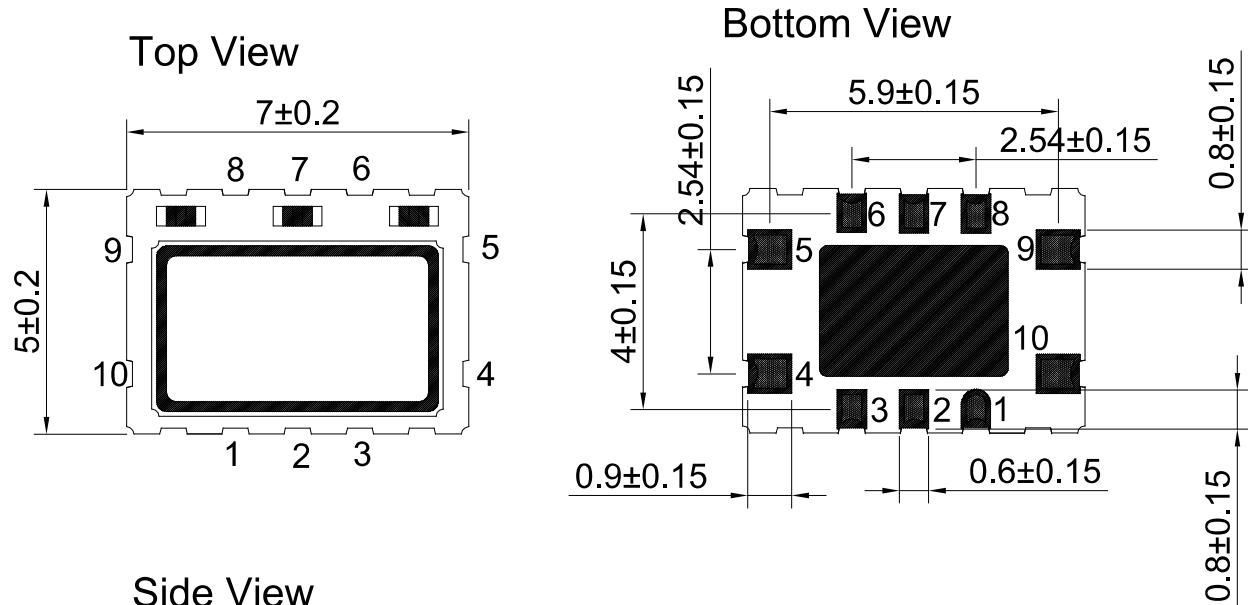
- 25.6MHz Clipped Sine wave output
- Operating temperature -40°C to +85°C
- 3.3V supply, 6mA maximum current
- Less than +/-0.5ppm first year
- Less than +/-3ppm over 10years

Typical Applications

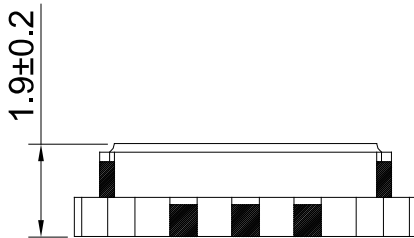
- Mobile SATCOM
- Mobile Radio
- Harsh Environments

Mechanical Drawing & Pin Connections

Drawing No: MD150015-3



Side View



Unit : mm
1mm=0.0394inch

Pin Function

#1	NC
#2	NC
#3	NC
#4	GND
#5	Output
#6	NC
#7	NC
#8	Tri-State Control
#9	VDD
#10	VCON



Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Nominal Frequency				25.6		MHz	
Nominal Frequency Tolerance		At +25°C initial	-0.5		+0.5	ppm	
RF Output							
Waveform :			Clipped Sine Wave				
Output Level			1.0			Vp-p	
Output Load Capacitance		Operating range		10K//10pF		K//pF	
Start Time					2.0	ms	
Frequency control							
Control Voltage Range	V _{con}		0.3	1.65	3.0	V	
Linearity					10	%	
VAFC Input Impedance			100			KOhm	
Pulling Range		V _{con} =0.3V	5		12	ppm	
		V _{con} =3.0V	-12		-5	ppm	
Power Supply							
Supply Voltage	V _{cc}		3.13	3.3	3.47	V	
Supply Current		At max. supply voltage			8.0	mA	
Frequency Stability							
Vs. Temperature		Ref. to the midpoint between minimum and maximum frequency value.	-0.2		+0.2	ppm	
Vs. Supply Voltage		Supply voltage varied at +/- 5% at 25°C	-0.1		+0.1	ppm	
vs. Load		+/-5% load change	-0.1		+0.1	ppm	
Aging	First year				+/-0.5	ppm	
	3 years				+/-1	ppm	
	10 years				+/-3	ppm	
SSB Phase noise		10Hz			-80	dBc/Hz	
		100 Hz			-110		
		1 KHz			-135		
		10 KHz			-145		
		100 KHz			-150		
Environmental Conditions							
Storage temperature range	-55°C to +125°C						
Operating temperature range	-40°C to 85°C						
Thermal Shock	MIL-STD-883 1010 Condition B; JESD22-A104 Condition B, -55°C, 125 °C; soak time is 10 mins, with total 200 cycles						
Mechanical Shock	MIL-STD-883 2002 Condition B; JESD22-B104 Condition B, 1500G, half-sine, 0.5ms, each axis for 3 times.						
Vibration	MIL-STD-883 2007 Condition A; JESD22-B103 Condition 1, 10~2000Hz, 1.52mm, 20G, each axis for 4 hrs						