

**Features and Benefits**

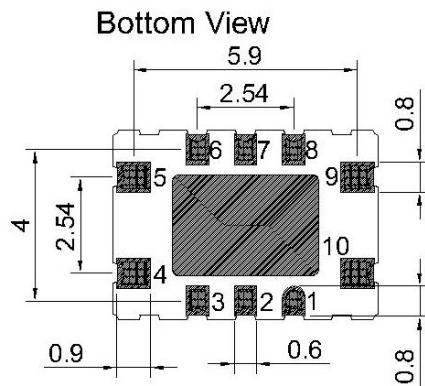
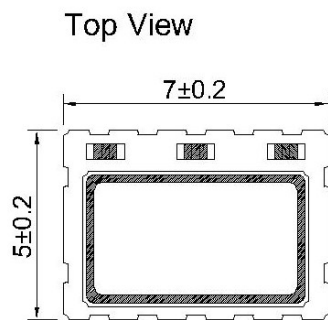
Better than +/-0.5PPM from -40°C to +85°C  
 6.4MHz CMOS output  
 3.3V supply, 10mA maximum current  
 Less than -140dBc/Hz @1KHz offset  
 Less than -150dBc/Hz @10KHz offset

**Typical Applications**

Mobile SATCOM  
 Mobile Radio  
 Harsh Environments  
 Femto cell

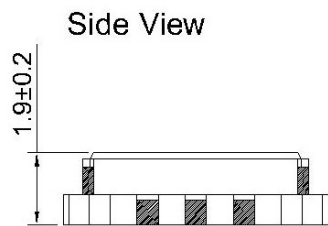
**Mechanical Drawing & Pin Connections**

Drawing No: MD150015-2

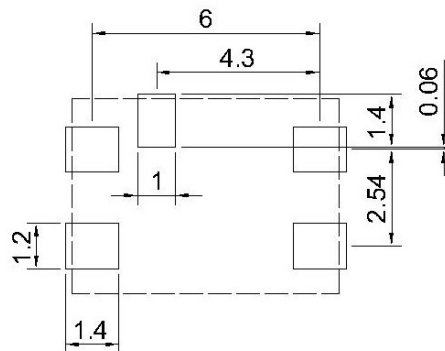


**Pin Function**

#1	NC
#2	NC
#3	NC
#4	GND
#5	CMOS/Clipped Sinewave Output
#6	NC
#7	NC
#8	Tri-State Control
#9	VDD
#10	VCON VC-TCXO GND TCXO



**Recommended Soldering Pattern**



Unit : mm

## Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Nominal Frequency	F <sub>nom</sub>			6.400000		MHz	
Output Wave Form			CMOS				
Output Voltage Level(High)			2.97			V	
Output Voltage Level(Low)					0.33	V	
Duty			45		55	%	
Output Load		Operating range			15	pF	
Duty Cycle		Measured at 50% V <sub>DD</sub> trigger level	45	50	55	%	
Rise and Fall Times		CMOS logic output at 10% to 90%			8.0	ms	
Start Time					2.0	ms	
Tri-State	Output Active		2.31			V	
	Output in High-impedance				0.99	V	
<b>Power Supply</b>							
Supply Voltage	V <sub>cc</sub>		2.97	3.3	3.63	V	
Supply Current		At maximum supply voltage			10	mA	
<b>Frequency Control*</b>							
Control Voltage Range	V <sub>c</sub>			1.5		V	
Tuning Range		V <sub>con</sub> =0.5V	+5		+10	ppm	
		V <sub>con</sub> =2.5V	-10		-5	ppm	
Linearity					10	%	
VAFC Input Impedance			100			Kohm	
<b>Frequency Stability</b>							
VS. Temperature		From -40°C to +85°C			+/-0.5	ppm	
Tolerance at +25°C		Frequency at +25°C,			+/-2.0	ppm	
VS. Supply Voltage		+/-5% change at 25°C			+/-0.2	ppm	
VS. Load Change		+/-10% change at 25°C			+/-0.2	ppm	
Year Aging		First year			+/-1.0	ppm	
Phase Noise (typ.)		@10 Hz		-100		dBc/Hz	
		@100 Hz		-125			
		@1 KHz		-140			
		@10 KHz		-150			
<b>Environmental Conditions</b>							
<b>Parameter</b>	<b>Reference Std.</b>			<b>Test Condition</b>			
Operating Temperature range	-40°C to +85°C						
Storage Temperature range	-40°C to +85°C						
Vibration Test	MIL-STD-883 2007 Condition A JESD22-B103 Condition 1			10 – 2000Hz, 1.52mm, 20g, each axis 4hrs			
Thermal Shock	MIL-STD-883 1010 Condition B JESD22-A104 Condition B			-55°C, 125°C; soak time is 10mins, 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			