

Features and Benefits

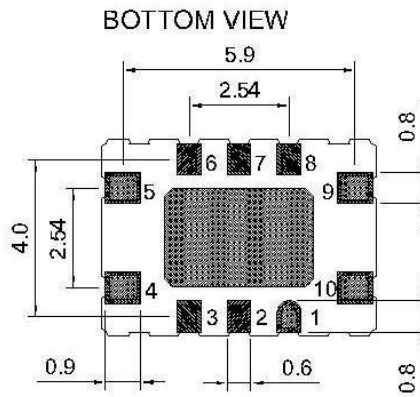
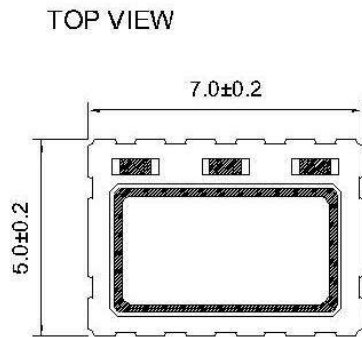
Better than +/- 0.2 PPM from -40°C to +85°C
 19.2MHz low noise clipped sine wave output
 3.3V supply; 3.5mA maximum
 Less than -142dBc/Hz @ 1KHz offset
 Less than -150dBc/Hz @ 10KHz offset

Typical Applications

Mobile Radio
 GPS Reference
 Beidou Navigation Systems

Mechanical Drawing & Pin Connections

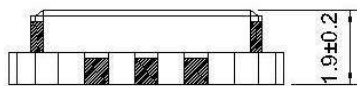
Drawing No: MD150015-1



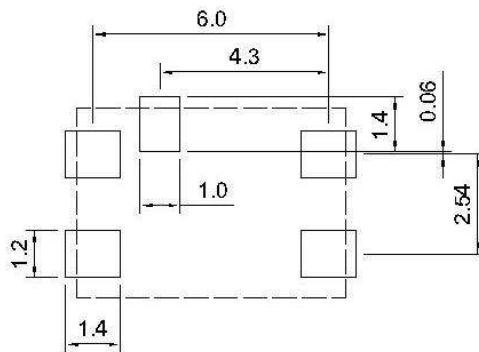
Pin Function:

#1	NC
#2	NC
#3	NC
#4	GND
#5	Output
#6	NC
#7	NC
#8	Tri-State Control
#9	V _{DD}
#10	V _{CON}

SIDE VIEW



Recommended Soldering Pattern



Unit : mm

Specifications

Oscillator Specification		Sym	Condition	Value			Unit	Note
				Min.	Typ.	Max.		
Nominal Frequency		F _{nom}			19.2000		MHz	
Output Wave Form				Clipped sine wave				
Output Voltage Level				0.8			V _{p-p}	
Output Load					10//10		Kohm/pF	
Start Time						2.0	ms	
Tri-State	Output Active			2.31			V	
	Output in High-impedance					0.99	V	
Power Supply								
Supply Voltage		V _{cc}		3.135	3.3	3.465	V	
Supply Current			At maximum supply voltage			3.5	mA	
Frequency Control*								
Control Voltage Range		V _c		0.5	1.5	2.5	V	Positive slope
Tuning Range			Reference to VCON at 1.5V	+/-5.0		+/-10	ppm	
Vcon Input impedance				100			Kohm	
Linearity						10.0	%	
Frequency Stability								
VS. Temperature			From -40°C to +85°C			+/-0.2	ppm	
Tolerance at 25°C			Frequency @25°C, 1hour after 2times reflow			+/-2.0	ppm	
VS. Supply Voltage			Supply voltage varied +/-5% at 25°C			+/-0.2	ppm	
VS. Load Change			+10% load change			+/-0.2	ppm	
First Year Aging			First year at 25°C			+/-1.0	ppm	
Phase Noise (typ.)			1 KHz			-142	dBc/Hz	
			10 KHz			-150		
Environmental Conditions								
Parameter		Reference Std.			Test Condition			
Operating temperature range		-40°C to +85°C						
Storage temperature range		-55°C to +125°C						
Vibration Test		MIL-STD-883 2007 Condition A JESD22-B103 Condition A			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			