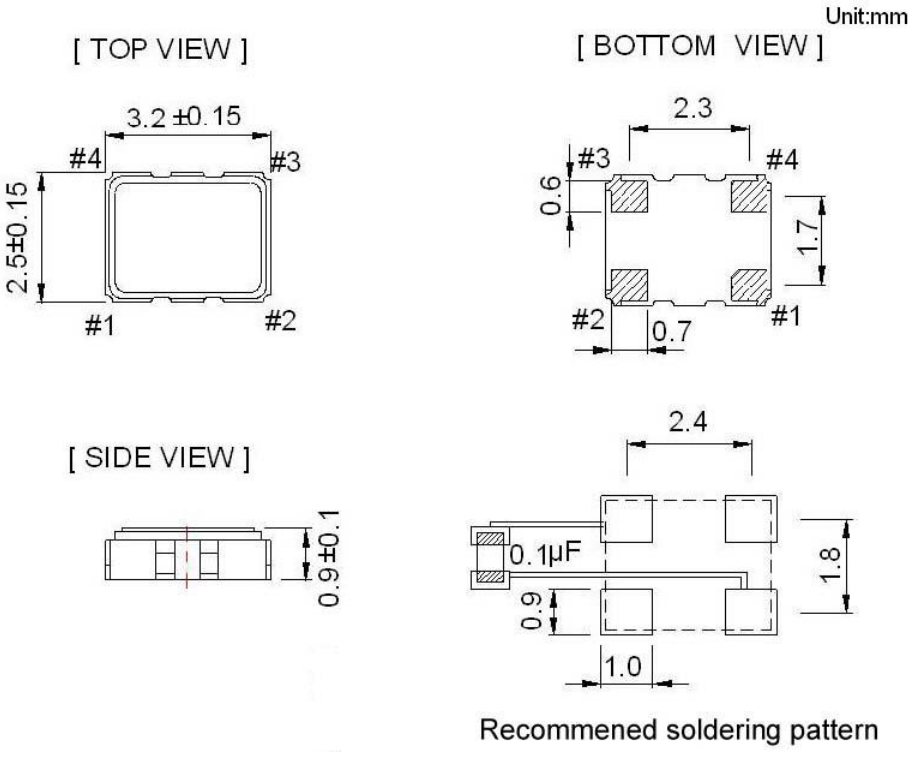
Features and Benefits

Better than +/- 1PPM from -40℃ to +85℃
10MHz low consumption clipped sine wave output
3.3V supply; 2.0mA maximum
Less than -135dBc/Hz @ 1KHz offset
Less than -148dBc/Hz @ 10KHz offset

Typical Applications

Mobile Radio
GPS Reference
Beidou Navigation Systems

Mechanical Drawing & Pin Connections



Pin	Function
#1	VCON
#2	GND
#3	Output
#4	VDD

Specifications

Oscillator Specification		Sym	Condition	Value			Unit	Note
				Min.	Typ.	Max.		
Nominal Frequency		F_{nom}			10.000000		MHz	
Output	Output Waveform		DC Couple clipped sine wave		Clipped sine wave			
	Output Voltage Level			0.8		2.0	Vp-p	
	Output Load				10Kohm//10pF			
	Start Up Time					2.0	ms	
Power Supply								
Supply Voltage		V_{cc}		2.85	3.0	3.15	V	
Supply Current			At maximum supply voltage			2.0	mA	
Frequency Control*								
Control Voltage Range		V_c		0.5	1.5	2.5	V	
Tuning Range			Reference to VCON at 1.5V	+/-5.0			ppm	
Vcon Input Impedance			Measured between VCON and GND pin	500			KOhm	
Linearity						10.0	%	
Frequency Stability								
VS. Temperature			-40°C to 85°C, ref 25°C	-1.0		+1.0	ppm	
Tolerance At 25°C			Frequency @25C, 1hour after 2 times reflow.	-2.0		+2.0	ppm	
VS. Supply Voltage			Supply voltage varied +/-5% at 25C	-0.2		+0.2	ppm	
VS. Load Change			+-10% load change	-0.2		+0.2	ppm	
First Year Aging			First year at 25C	-1.0		+1.0	ppm	
SSB Phase noise (typ.)			100 Hz		-115		dBc/Hz	
			1 KHz		-135			
			10 KHz		-148			

Environmental Conditions		
Parameter	**Reference Std.**	**Test Condition**
Operating temperature range	-40°C to 85°C	
Storage temperature range	-40°C to 85°C	
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 4hrs
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.

Test Circiut