Features and Benefits

Better than +/- 280 ppb from -40℃ to +85℃
10MHz low noise clipped sine wave output
3.3V supply; 3.5mA maximum
Less than -145dBc/Hz @ 1KHz offset
Less than -155dBc/Hz @ 10KHz offset

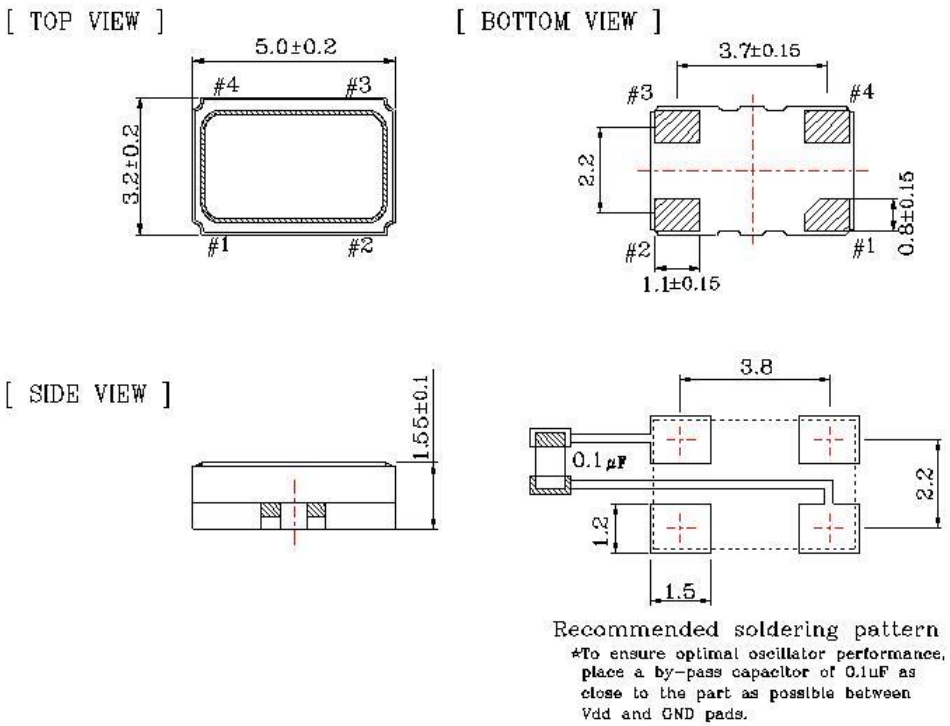
Typical Applications

Mobile Radio
GPS Reference
Beidou Navigation Systems

Mechanical Drawing & Pin Connections

Drawing No: MD140051-1

Unit : mm



PIN FUNCTIONS

Pin	Function
#1	GND/NC
#2	GND
#3	Output
#4	Supply Voltage

Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Nominal Frequency	F_{nom}			10.000000		MHz	
Output Wave Form				Clipped sine wave			
Output Voltage Level			0.8		2.0	Vp-p	
Output Load				10//10		Kohm/pF	
Start Time					2.0	ms	
Power Supply							
Supply Voltage	V_{cc}		3.135	3.3	3.465	V	
Supply Current		At maximum supply voltage			3.5	mA	
Frequency Stability							
VS. Temperature		-40°C to +85°C (Ref, to the midpoint between min. and max. frequency value.)	-0.28		+0.28	ppm	
Tolerance At 25°C		Frequency @25°C, 1hour after 2 times reflow.	-2.0		+2.0	ppm	
VS. Supply Voltage		Supply voltage varied +/-5% at 25°C	-0.2		+0.2	ppm	
VS. Load Change		+-10% load change	-0.2		+0.2	ppm	
First Year Aging		First year at 25°C	-1.0		+1.0	ppm	
SSB Phase noise (typ.)		10 Hz		-100		dBc/Hz	
		100 Hz		-125			
		1 KHz		-145			
		10 KHz		-155			
		100KHz		-158			

Environmental Conditions		
Parameter	**Reference Std.**	**Test Condition**
Operating temperature range	-40°C to +85°C	
Storage temperature range	-55°C to +125°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.