Features and Benefits

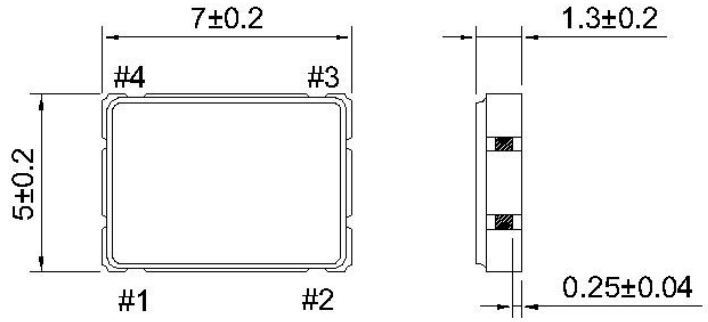
+/-50PPM frequency stability overall
25MHz CMOS output
3.3V supply, 10mA maximum current
Operating temperature from- 40°C to +85°C

Typical Applications

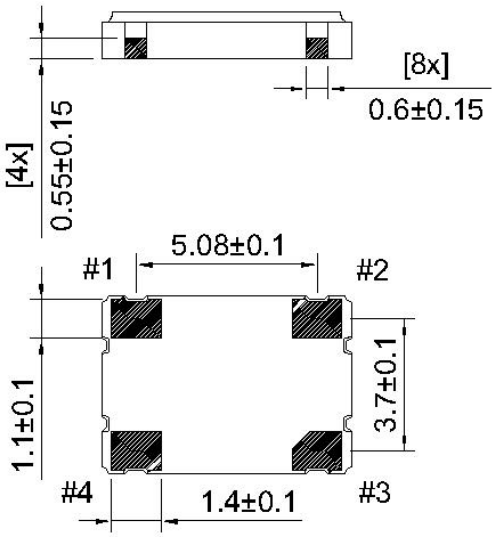
Processor Clock Reference

Mechanical Drawing & Pin Connections

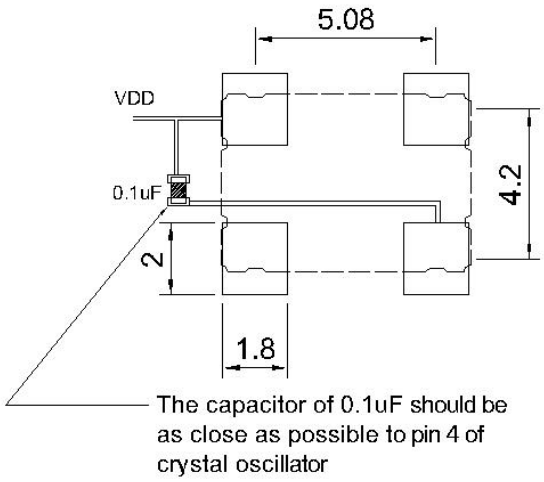
Drawing No: MD150027-1



Pad	Function
#1	Tri-State/NC
#2	GND
#3	Output
#4	VDD



Unit : mm



Specifications

Oscillator Specification		Sym	Condition	Value			Unit	Note
				Min.	Typ.	Max.		
Nominal Frequency		F_{nom}			25.000000		MHz	
Output Wave Form					CMOS			
Output Voltage Level(High)				90%V_{DD}			V	
Output Voltage Level(Low)						10% V_{DD}	V	
Output Load			Operating range			15	pF	
Duty Cycle			Measured at 50% V_{DD} trigger level	45	50	55	%	
Rise and Fall Times						6.0	nSec	
Start Time						5.0	mSec	
Tri-State	Output Active		Pin 1 Tri-state	0.7 V_{DD}			V	
	Output in High-impedance					0.3 V_{DD}	V	
Power Supply								
Supply Voltage		V_{cc}		2.97	3.3	3.63	V	
Supply Current			At maximum supply voltage			10	mA	
Standby Current			Output disabled			10	uA	
Jitter								
Period Jitter(Pk-Pk)						40	pSec	
Frequency Stability								
Frequency Stability(Overall)			Includes frequency tolerance@+25°C and frequency stability vs. operating temperature range and voltage change and first year aging.			+/-50	ppm	
VS. Supply Voltage			+/-10% change at 25°C			+/-3	ppm	
Aging			Frequency drift in first year at 25°C			+/-3	ppm	
RMS Phase Jitter			12K to 20MHz			1	pSec	

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 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	1500G, half-sine, 0.5ms, each axis for 3 times