



### Features and Benefits

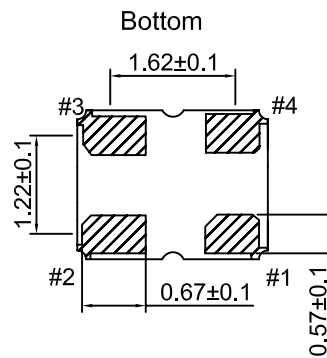
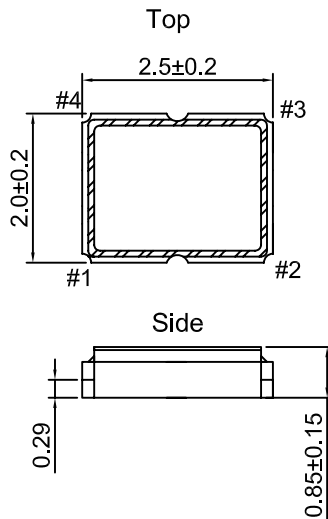
- 9.5MHz—60MHz Frequency range
- 1.8V,2.5V, and 3.3V Supply voltage
- CMOS Output waveform
- ±2.5ppm Stability Vs -40C ~ +85C
- 2.5x2.0mm Size

### Typical Applications

- Wireless Connectivity
- Smart grid

### Mechanical Drawing & Pin Connections

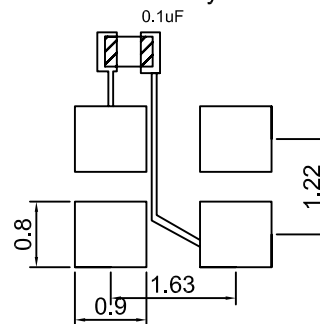
Drawing No: MD160028-1



PIN	FUNCTION
#1	Tri-state
#2	GND
#3	OUTPUT
#4	VDD

Unit : mm  
1mm = 0.0394 inches

#### Soleer Pad Layout



To ensure optimal oscillator performance, place a by-pass capacitor of 0.1µF as close to the part as possible between Vdd and GND pads.



## Specifications

Specification	Conditon	3.3V		2.5V		1.8V		Unit
		Min.	Max.	Min.	Max.	Min.	Max.	
Supply Voltage Variation(VDD)	±5%	3.135	3.465	2.375	2.625	1.71	1.89	V
Frequency Range		9.5	60	9.5	60	9.5	60	MHz
Aging(first year)	@25°C		±1.0		±1.0		±1.0	ppm
Supply Current	9.5MHz≤Fo≤60MHz	-	10	-	7	-	5	mA
Output Level(CMOS)	High (logic 1)	2.97	-	2.25	-	1.62	-	V
	Low (logic 0)		0.33		0.25		0.18	V
Duty Cycle		45	55	45	55	45	55	%
Rise/Fall time			8		8		8	nSec
Start Time			5		5		5	mSec
Tri-state(input to pin1)	Enable(high or floating)	2.31		1.75		1.26		V
	Disable(low or GND)		0.99		0.75		0.54	V
RMS Phase Jitter	Integrated 12kHz-20MHz		1		1		1	pSec
Phase Noise@26MHz								
10Hz			-80		-80		-80	
100Hz			-110		-110		-110	dBc/H z
1KHz			-130		-130		-130	
10KHz			-145		-145		-145	
Storage Temp. Range		-55°C to +125°C						°C

## Frequency Stability vs. Temperature

	±2.5PPM	±5.0PPM	±10PPM
-40°C to +85°C	Available	Available	Available
-40°C to +90°C	Conditional	Available	Available
-40°C to +105°C	Not Available	Conditional	Available

Note: not all combination of options are available. Other specifications may be available upon request.