



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# OV Type

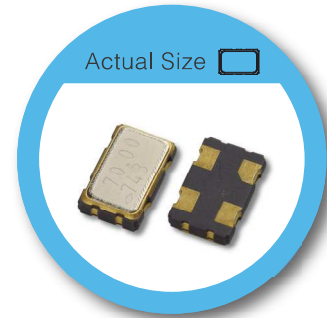
## 5.0 x 3.2 mm SMD Crystal Oscillator

### FEATURE

- Typical 5.0 x 3.2 x 1.2 mm ceramic SMD package.
- Tight symmetry (45 to 55%) available.
- Realize the standby function with Tri-State

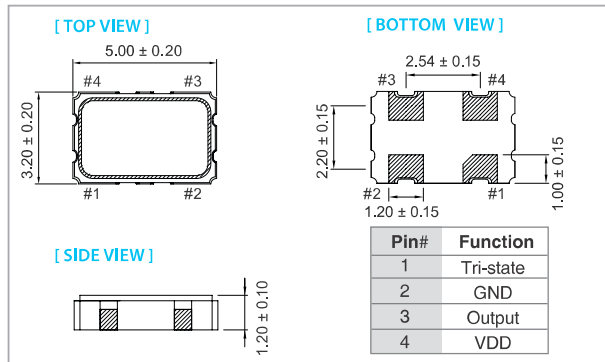
### TYPICAL APPLICATION

- GPS, Mobile Phone
- WLAN, Wireless, Fiber/10Gbit Ethernet
- Notebook, PDA, DSC

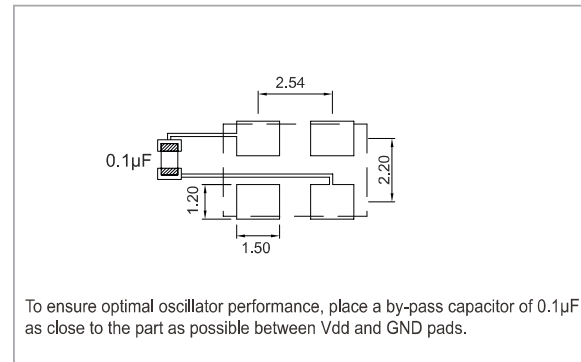


RoHS Compliant

### DIMENSION (mm)



### SOLDER PAD LAYOUT (mm)



### ELECTRICAL SPECIFICATION

Parameter	3.3V		2.5V		1.8V		unit
	Min.	Max.	Min.	Max.	Min.	Max.	
<b>Supply Voltage Variation(V<sub>DD</sub>)</b>	V <sub>DD</sub> -10%	V <sub>DD</sub> +10%	V <sub>DD</sub> -10%	V <sub>DD</sub> +10%	V <sub>DD</sub> -10%	V <sub>DD</sub> +10%	V
<b>Frequency Range</b>	0.0137	160	0.0137	160	0.0137	135	MHz
<b>Supply Frequency</b>	2.048, 25, 26, 27, 50, 66.667, 100, 125						MHz
<b>Supply Current</b>							
13.7 kHz ≤ F <sub>o</sub> ≤ 93 kHz	—	1	—	1	—	1	mA
0.3125 MHz ≤ F <sub>o</sub> < 50 MHz (A1)	—	10	—	8	—	7	
40 MHz ≤ F <sub>o</sub> < 75 MHz	—	20	—	18	—	15	
75 MHz ≤ F <sub>o</sub> < 135 MHz	—	35	—	30	—	25	
135 MHz ≤ F <sub>o</sub>	—	45	—	40	—	—	
<b>Output Level (CMOS)</b> Output High (Logic "1")	2.97	—	2.25	—	1.62	—	V
Output Low (Logic "0")	—	0.33	—	0.25	—	0.18	
<b>Transition Time: Rise/Fall Time</b>							
13.7 kHz ≤ F <sub>o</sub> ≤ 93 kHz	—	50	—	50	—	50	nSec
0.3125 MHz ≤ F <sub>o</sub> < 100 MHz	—	5	—	5	—	5	
100 MHz ≤ F <sub>o</sub>	—	3	—	3	—	3	
<b>Start Time</b>	—	5	—	5	—	5	mSec
<b>Output Drive Capability (CL)</b>	—	15	—	15	—	15	pF
<b>Tri-State (Input to Pin 1)</b>							
Enable (High voltage or floating)	2.31	—	1.75	—	1.26	—	V
Disable (Low voltage or GND)	—	0.99	—	0.75	—	0.54	
<b>Period Jitter(Pk-Pk)</b>	—	40	—	40	—	40	pSec
<b>RMS Phase Jitter (Integrated 12 kHz~20 MHz)</b>	—	1	—	1	—	1	pSec
<b>Standby Current</b>	—	10	—	10	—	10	µA
<b>Aging (@ 25°C 1st year)</b>	—	±3	—	±3	—	±3	ppm
<b>Storage Temp. Range</b>	-55	125	-55	125	-55	125	°C

Standard frequencies are frequencies which the crystal has been designed and does not imply a stock position.

+ Transition times are measured between 10% and 90% of V<sub>DD</sub>, with an output load of 15pF.

### FREQ. STABILITY vs. TEMP. RANGE

Temp. (°C)	ppm	±20	±25	±50
-10 ~ +60	○	○	○	○
-20 ~ +70	△	○	○	○
-40 ~ +85	△	○	○	○
-40 ~ +125	×	×	○	○

\* ○: Available △: Conditional X: Not available

\* Inclusive of calibration @ 25 °C, operating temperature range, input voltage variation, load variation, aging (1<sup>st</sup> year), shock, and vibration

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

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Specifications subject to change without notice.