



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!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# XS Type

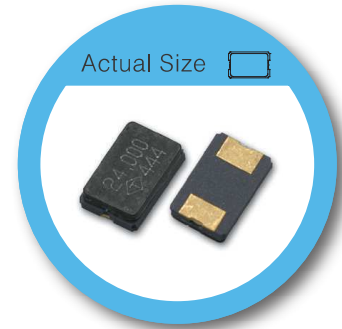
## 5.0 x 3.2 mm Glass Seal SMD Crystal

### FEATURE

- Typical 5.0 x 3.2 x 1.2 mm full ceramic SMD package.
- 12 mm width Tape & Reel package for automatic assembly.

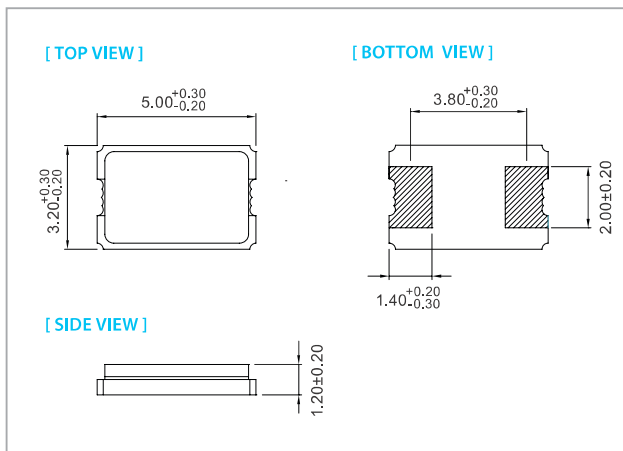
### TYPICAL APPLICATION

- Automotive
- Notebook, Computer Peripherals, Hard Disk
- MP3 Player, Audio & Visual

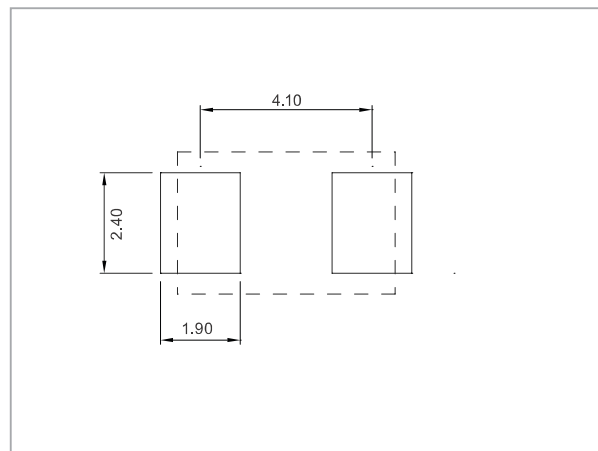


RoHS Compliant

### DIMENSION (mm)



### SOLDER PAD LAYOUT (mm)



### ELECTRICAL SPECIFICATION

Parameter	Min.	Typical	Max.	Unit
Storage Temp. Range	-55	-	125	°C
Level of Drive	-	10	300	µw
Shunt Capacitance(Co)	-	-	7.0	pF
Insulation Resistance	500 MΩ @ DC100V	-	-	
Aging		±3.0		ppm / year

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

### EQUIVALENT SERIES RESISTANCE (E.S.R)

Frequency Range	MODE	E.S.R
8 MHz ≤ Fo < 10 MHz	A1	<180Ω
10 MHz ≤ Fo < 16 MHz	A1	<150Ω
16 MHz ≤ Fo < 20 MHz	A1	<100Ω
20 MHz ≤ Fo < 30 MHz	A1	<70Ω
30 MHz ≤ Fo ≤ 54 MHz	A1	<50Ω

### FREQ. STABILITY vs. TEMP. RANGE

Temp.(°C)	ppm			
	±5	±10	±15	±20
-10 ~ +60	△	○	○	○
-20 ~ +70	×	△	○	○
-40 ~ +85	×	△	○	○

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

### FREQ. STABILITY vs. WIDE TEMP. RANGE

Temp.(°C)	ppm			
	±15	±20	±30	±50
-40 ~ +105	△	○	○	○
-40 ~ +125	×	×	△	○

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

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