

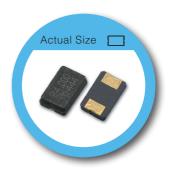
# **5.0** x **3.2** mm Glass Seal SMD Crystal – XS Type

#### **FEATURE**

- Typical  $5.0 \times 3.2 \times 1.3$  mm full ceramic SMD package.
- 12 mm width Tape & Reel package for automatic assembly.
- Packing: Tape & Reel, 1000/3000 pcs per Reel.

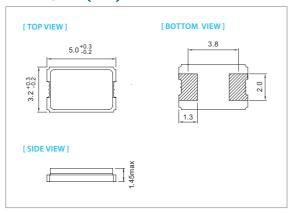
#### **TYPICAL APPLICATION**

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

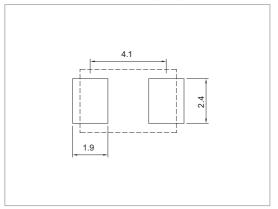


**RoHS Compliant Standard** 

### **DIMENSION (mm)**



## **SOLDER PAD LAYOUT (mm)**



#### **ELECTRICAL SPECIFICATION**

Parameter	Min.	Typical	Max.	Unit
Storage Temp. Range	-55	-	125	°C
Level of Drive	-	10	500	μw
Shunt Capacitance (Co)	-	-	7.0	pF
Insulation Resistance	500 MΩ@ DC100V	-	-	
Aging	±5.0			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)**

TYPE FREQUENCY	MODE	E.S.R
10 MHz ≦ Freq. < 16 MHz	A1	<150Ω
16 MHz ≦ Freq. < 20 MHz	A1	<100Ω
20 MHz ≦ Freq. < 30 MHz	A1	< 70Ω
30 MHz ≤ Freq. < 50 MHz	A1	< 50Ω

## FREQ. STABILITY vs. TEMP. RANGE

Temp. (°C)	±5	±10	±15	±20
-10 ~ +60	Δ	0	0	0
-20 ~ +70	×	Δ	0	0
-40 ~ +85	X	Δ	$\triangle$	0

<sup>\* ○:</sup> Available △:Conditional X: Not available