

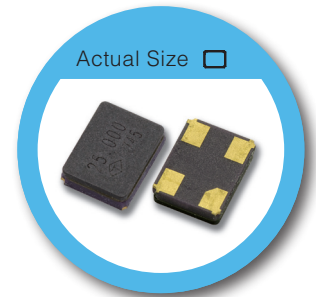
## 3.2 x 2.5 mm Glass Seal SMD Crystal – X2 Type

### FEATURE

- Typical 3.2 x 2.5 x 0.8 mm full ceramic SMD package.
- 8 mm width Tape & Reel package for automatic assembly.
- Packing: Tape & Reel, 1000/2000/3000 pcs per Reel.

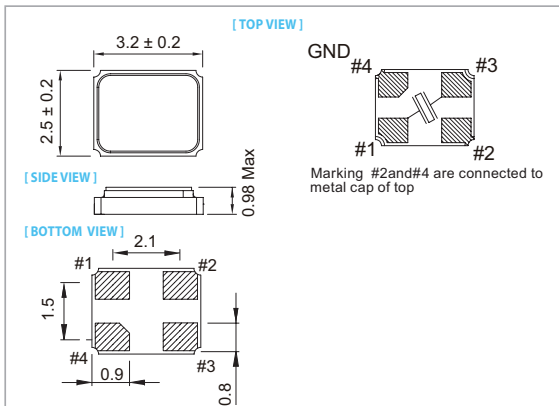
### TYPICAL APPLICATION

- PDA, DSC
- DECT/ WDCT
- Wimax / WLAN

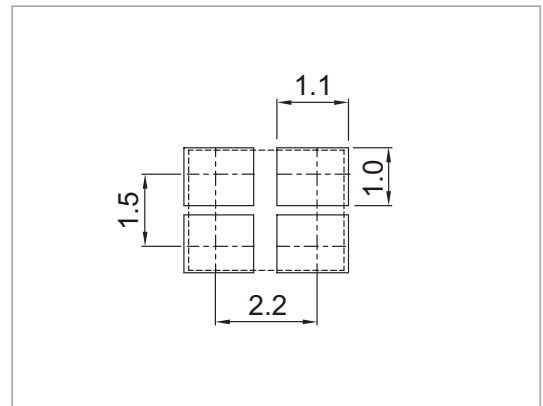


RoHS Compliant Standard

### DIMENSION (mm)



### SOLDER PAD LAYOUT (mm)



### ELECTRICAL SPECIFICATION

Parameter	Min.	Typical	Max.	Unit
Storage Temp. Range	-55	-	125	°C
Level of Drive	-	10	100	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
12 MHz ≤ Freq. ≤ 13 MHz	A1	<170 Ω
13 MHz < Freq. < 19.5 MHz	A1	<100 Ω
19.5 MHz ≤ Freq. < 27 MHz	A1	< 70 Ω
27 MHz ≤ Freq. < 48 MHz	A1	< 60 Ω

### FREQ. STABILITY vs. TEMP. RANGE

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

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