

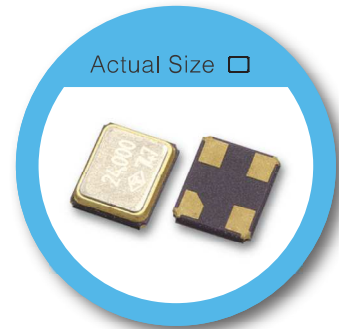
## XY Type 2.5 x 2.0 mm SMD Crystal

### FEATURE

- Typical 2.5 x 2.0 x 0.45 mm ultra thin ceramic package.
- 8 mm width Tape & Reel package for automatic assembly.
- Tight tolerance 10 ppm available.

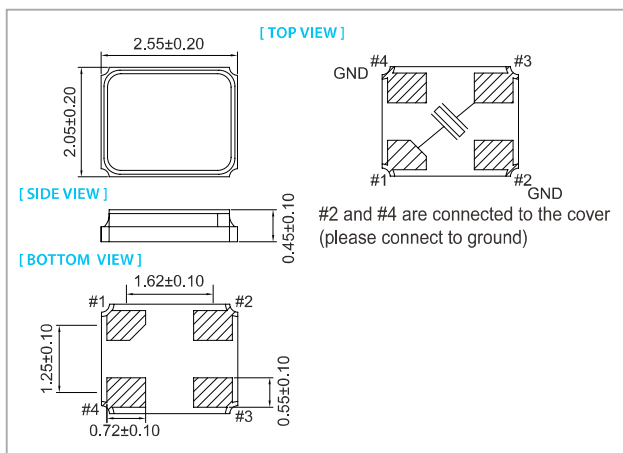
### TYPICAL APPLICATION

- Bluetooth , Mobile phone, Wireless LAN.
- Office Automation
- Audio & Video

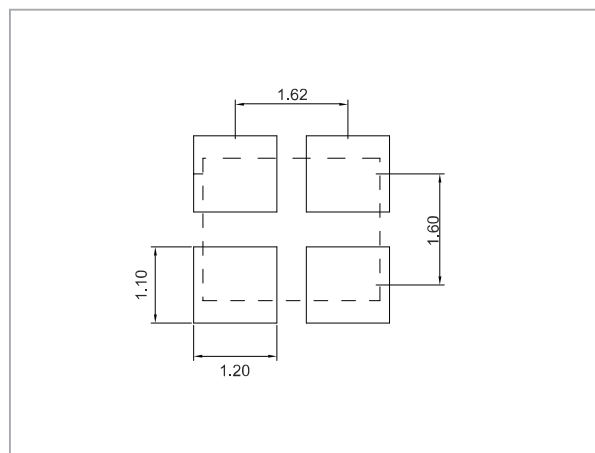


RoHS Compliant

### DIMENSION (mm)



### SOLDER PAD LAYOUT (mm)



### ELECTRICAL SPECIFICATION

Parameter	Min.	Typical	Max.	Unit
Storage Temp. Range	-40	-	125	°C
Standard Frequency		16, 24, 26, 40		MHz
Level of Drive	-	10	200	µw
Shunt Capacitance (Co)	-	-	3.0	pF
Insulation Resistance	500 MΩ @ DC100V	-	-	
Aging		±1.0 to ±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
12 MHz ≤ Fo < 20 MHz	A1	<150 Ω
20 MHz ≤ Fo < 30 MHz	A1	<80 Ω
30 MHz < Fo ≤ 54 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

### 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.**