

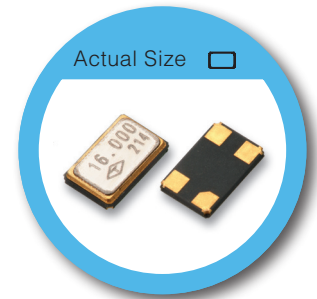
## 4.0 x 2.5 mm SMD Crystal – XW Type

### FEATURE

- Typical 4.0x2.5x0.8 mm ceramic SMD package.
- 12 mm width Tape & Reel package for automatic assembly.
- Tight tolerance 10 ppm available.
- Packing: Tape & Reel, 1000/2000/3000/5000pcs per Reel.

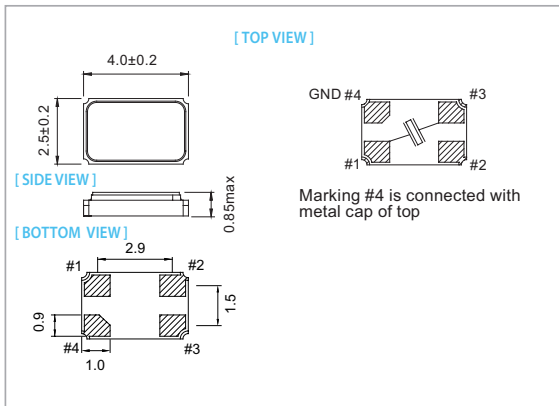
### TYPICAL APPLICATION

- Bluetooth
- Mobile Phone

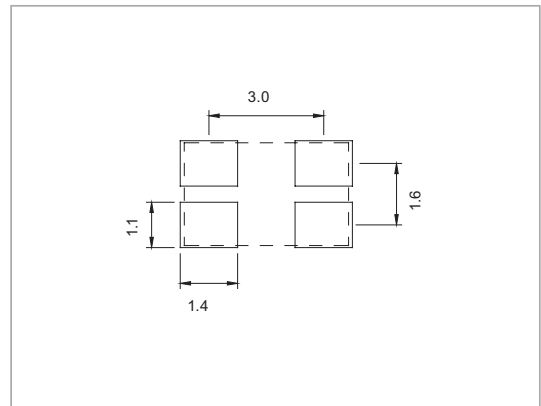


**RoHS Compliant Standard**

### 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    | pF         |
| Insulation Resistance  | 500 MΩ @ DC100V | -       | -    |            |
| Aging                  |                 | ±1.0    |      | 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. < 16 MHz     | A1   | 70Ω   |
| 16 MHz ≤ Freq. < 32 MHz     | A1   | 50Ω   |
| 32 MHz ≤ Freq. ≤ 36.864 MHz | A1   | 20Ω   |

### FREQ. STABILITY vs. TEMP. RANGE

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

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