

# XR Type

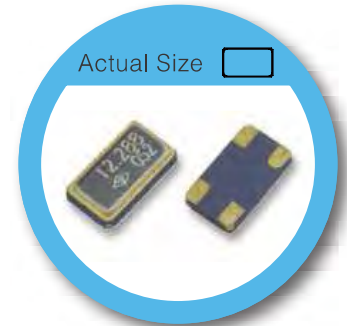
## 6.0 x 3.5 mm SMD Crystal

### FEATURE

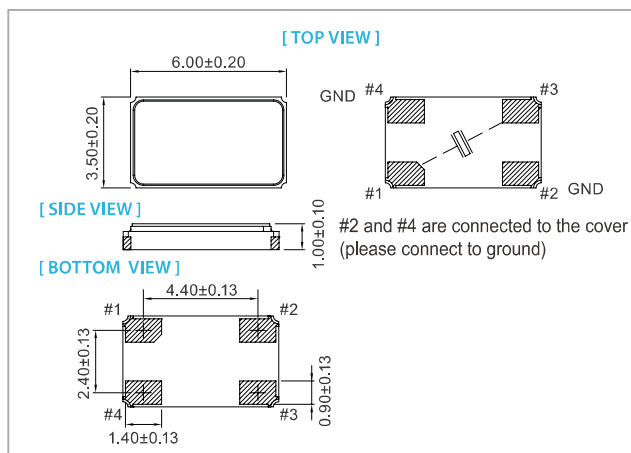
- Typical 6.0 x 3.5 x 1.0 mm ceramic package.
- 16 mm width Tape & Reel package for automatic assembly.
- Tight tolerance 10 ppm available.

### TYPICAL APPLICATION

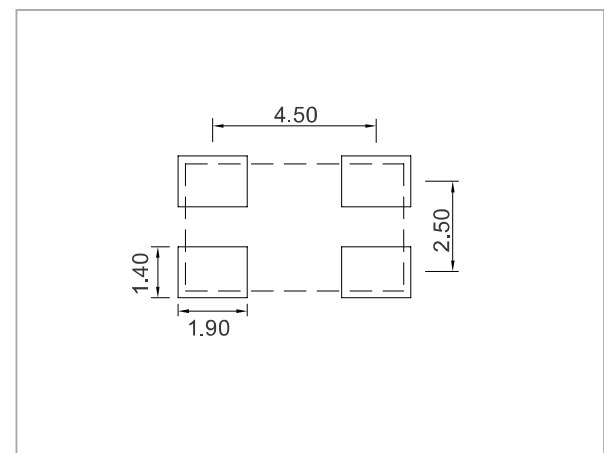
- Automotive
- MP3 Player, DECT
- WLAN


 Actual Size 
**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 < 12 MHz  | A1   | <60 Ω |
| 12 MHz ≤ Fo < 13 MHz | A1   | <50 Ω |
| 13 MHz ≤ Fo < 19 MHz | A1   | <45 Ω |
| 19 MHz ≤ Fo < 20 MHz | A1   | <40 Ω |
| 20 MHz ≤ Fo < 30 MHz | A1   | <35 Ω |
| 30 MHz ≤ Fo ≤ 50 MHz | A1   | <30 Ω |

### 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