

XS Type

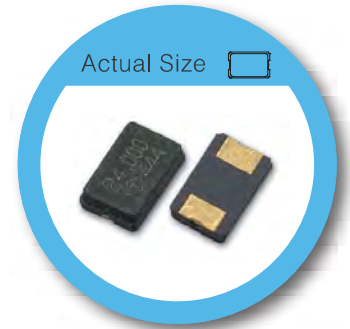
5.0 x 3.2 mm Glass Seal SMD Crystal

FEATURE

- Typical 5.0 x 3.2 x 1.2 mm full ceramic SMD package.
- 12 mm width Tape & Reel package for automatic assembly.

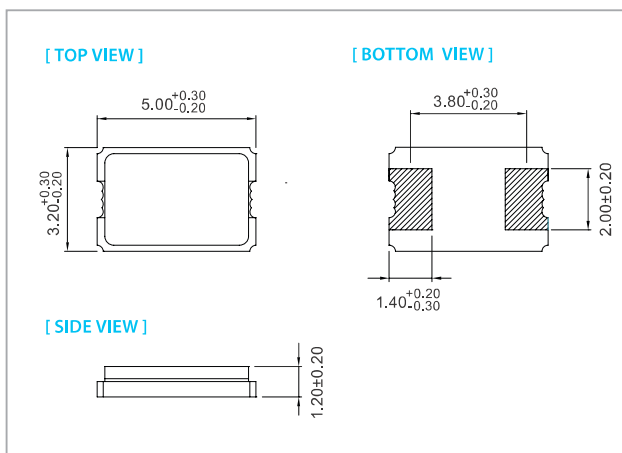
TYPICAL APPLICATION

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

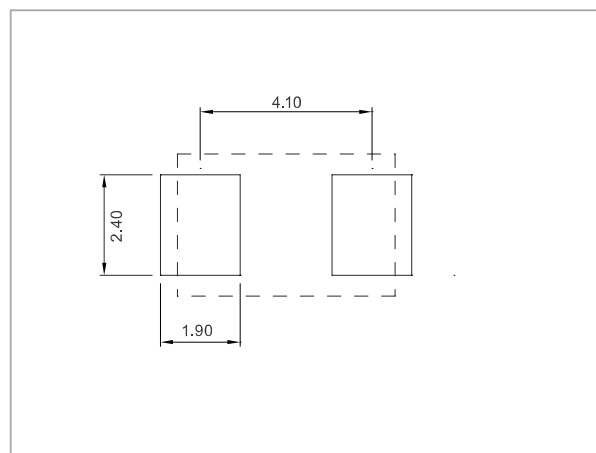


RoHS Compliant

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 < 10 MHz | A1 | <180Ω |
| 10 MHz ≤ Fo < 16 MHz | A1 | <150Ω |
| 16 MHz ≤ Fo < 20 MHz | A1 | <100Ω |
| 20 MHz ≤ Fo < 30 MHz | A1 | <70Ω |
| 30 MHz ≤ Fo ≤ 54 MHz | A1 | <50Ω |

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

Note: not all combination of options are available. Other specifications may be available upon request.