

High Reliability Crystal 2.5 x 2.0mm

Miniature Quartz Crystal Ceramic SMD



2.5 x 2.0mm Ceramic SMD

Product Features

- Rugged AT-cut crystal construction
- Miniature 2.5 x 2.0mm ceramic package
- Support high temperature up to 125°C
- Wide frequency range: 16~66MHz
- JIS-C0044 Drop Test compliant
- Available on tape & reel; 8mm tape, 3000 units per reel
- Pb-free and RoHS/Green compliant

Product Description

The 4-pad XR25 Series seam seal devices are housed in a standard 2.5 x 2.0mm ceramic package. The devices are ideal for surface mounting in densely populated or small formfactor PCB applications.

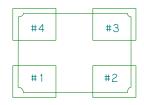
Designed and manufactured for high reliability, XR25 series meets the requirements of ultrasonic welding manufacturing process as well as the industry standard drop test. The series is ideal to provide accurate timing for applications that a high reliability is a must. The series supports operating temperature range of -40° C up to $+125^{\circ}$ C.

Applications

- Medical Devices
- Wearable Devices



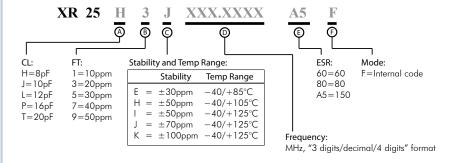
Top View Pin Location



Pin Functions:

Pin	Function
1	Xtal
2	GND
3	Xtal
4	GND

Part Ordering Information:



Please contact us for custom requirements for your specific application needs.





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Frequency Range:*

• 16.0000 MHz to 66.0000 MHz (Fundamental)

Characteristics at 25°C ±3°C:

- Frequency Calibration Tolerance: ±10ppm to ±50ppm*
- Load Capacitance: 7 to 32pF or Series Resonance*
- Effective Series Resistance (ESR):*

16.0000~MHz to 19.9999~MHz : $150\Omega~\text{max}$ 20.0000 MHz to 31.9999 MHz : 80Ω max 32.0000 MHz to 66.0000 MHz : 60Ω max

- Drive Level: $10\mu W$ typ. $(100\mu W \text{ max})$
- Shunt Capacitance: 3pF Max

Temperature Range:*

- Operating: -40 to +85°C or -40 to +105°C or -40 to +125°C
- Storage: -55 to +125°C

Temperature Stability:*

• ± 30 to ± 100 ppm

Aging at 25°C, First Year:

• ±3ppm Max

Centrifugal Force:

• SAE J2657 (1500G)

Reflow Temperature:

• 260°C Max, 10 seconds Max

Drop Test:

• JIS-C0044

Mechanical:

• Shock: JESD22-B104 • Solderability: J-STD-002

• Vibration: JESD22-B103

• Resistance to Soldering Heat: : J-STD-020 (SMD)

Environmental:

• Gross Test Leak: JESD22-A109

• Fine Test Leak: MIL STD 883 M1014

Moisture Resistance: JESD22-A101

• Insulation Resistance: 500 MΩ min (100 VDC)

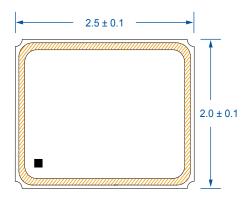
• Temperature Cycling: JESD22-A104

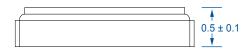
• High Temperature Exposure: JESD22-A103

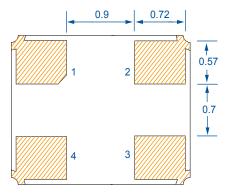
• High Temperature Operation Life: JESD22-A108

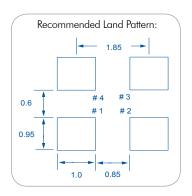
*Note: See Part Ordering Information

Package: (Scale: none; dimensions are in mm)













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