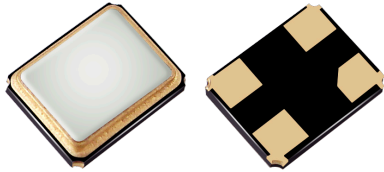


Miniature Quartz Crystal Ceramic SMD

XR20



2.0 x 1.6mm Ceramic SMD



Product Features

- Rugged AT-cut crystal construction
- Miniature 2.0 x 1.6mm ceramic package
- Support high temperature up to 125°C
- Wide frequency range: 24~66MHz
- JIS-C0044 Drop Test compliant
- Available on tape & reel; 8mm tape, 3000 units per reel
- Pb-free and RoHS/Green compliant

Product Description

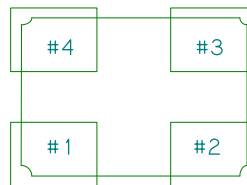
The 4-pad XR20 Series seam seal devices are housed in a standard 2.0 x 1.6mm ceramic package. The devices are ideal for surface mounting in densely populated or small form-factor PCB applications.

Designed and manufactured for high reliability, XR20 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°C.

Applications

- Medical Devices
- Wearable Devices

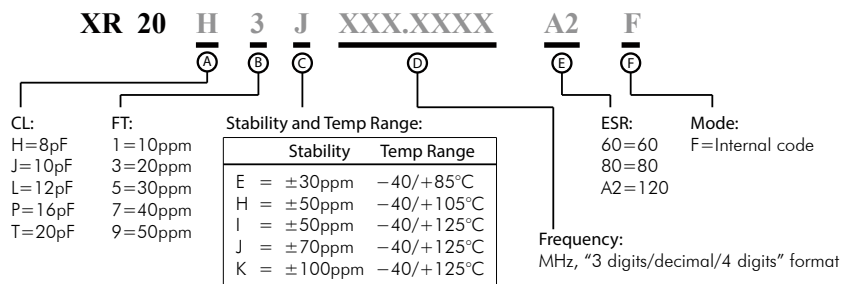
Top View Pin Location



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.

Miniature Quartz Crystal Ceramic SMD XR20



A product Line of
Diodes Incorporated



High Reliability Crystal
2.0 x 1.6mm

Frequency Range:*

- 24.0000 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):*

24.0000 MHz to 29.9999 MHz : 120Ω max

30.0000 MHz to 59.9999 MHz : 80Ω max

60.0000 MHz to 66.0000 MHz : 60Ω max

- Drive Level: 10μW typ. (100μW 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:*

- ±30ppm to 100ppm

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:

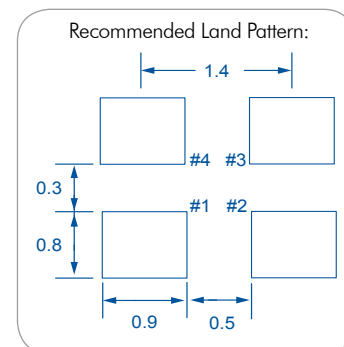
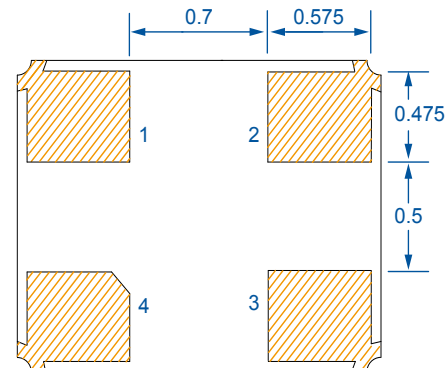
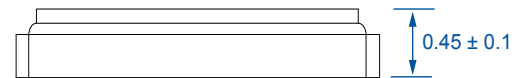
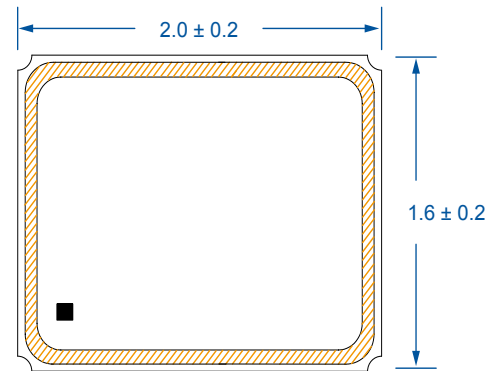
- Shock: JESD22-B104
- Solderability: J-STD-002
- Vibration: JESD22-B103
- Resistance to Soldering Heat: : J-STD-020 (SMD)

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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 2. support or sustain life and whose failure to perform when properly used in accordance with instructions for use provided in the labeling can be reasonably expected to result in significant injury to the user.
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