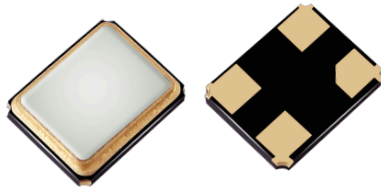


Miniature Quartz Crystal Ceramic SMD

FWQ



2.0 x 1.6mm Ceramic SMD

Product Features

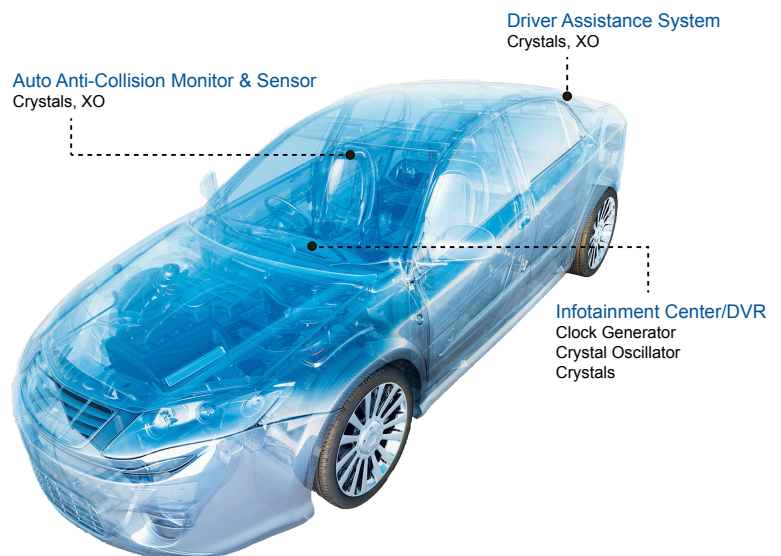
- Rugged AT-cut crystal construction
- 2.0 x 1.6mm ceramic package
- Available on tape & reel; 8mm tape, 3000 units per reel
- Pb-free and RoHS/Green compliant
- support high temperature up to 125°C
- Wide frequency range -8~66MHz
- AEC-Q200 compliant
 - Grade 3, Grade 2 & Grade 1

Product Description

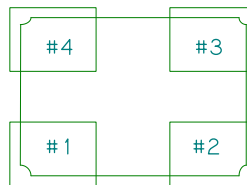
The 4-pad FWQ Series seam seal devices incorporate a sub-miniature AT-cut crystal resonator housed in a standard 2.0 x 1.6mm ceramic package. These compact crystal are ideal for surface mounting in densely populated PCB applications. The FWQ series is designed to meet the requirements of AEC-Q200 Grade 3, Grade 2 and Grade 1 for automotive applications, and supports operating temperature range of -40 up to +125°C.

Applications

- Automotive



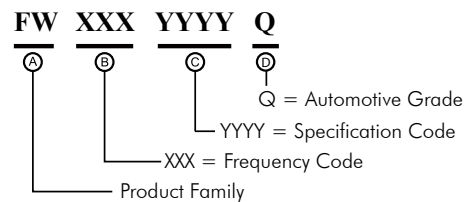
Top view pin location



Pin Functions:

Pin	Function
1	Xtal
2	GND
3	Xtal
4	GND

Part Ordering Information:



Following the above format, SaRonix-eCera part numbers will be assigned upon confirmation of exact customer requirements.

Miniature Quartz Crystal Ceramic SMD FWQ



A product Line of
Diodes Incorporated



AEC-Q200 Qualified
High Temperature Crystal
2.0 x 1.6mm

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):
 - 16.0000MHz to 19.9999MHz: 150Ω max
 - 20.0000MHz to 29.9999MHz: 90Ω max
 - 30.0000MHz to 66.0000MHz: 60Ω max
- Drive Level: 10μW typ. 100μW max
- Shunt Capacitance: 5pF Max.

Temperature Range:

- Operating: -20°C to +70°C; -40 to +85°C; -40°C to +125°C
- Storage: -55°C to +125°C

Temperature Stability:

- ±10ppm to ±50ppm (-20°C to +70°C)
- ±15ppm to ±50ppm (-40°C to +85°C)
- ±25ppm to ±100ppm (-40°C to +105°C)
- ±50ppm to ±100ppm (-40°C to +125°C)

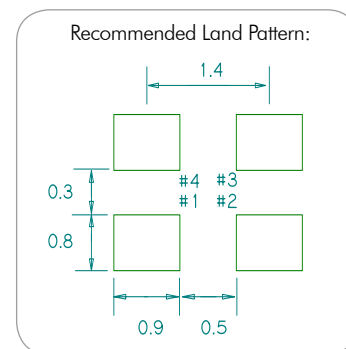
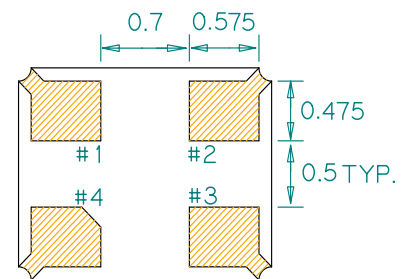
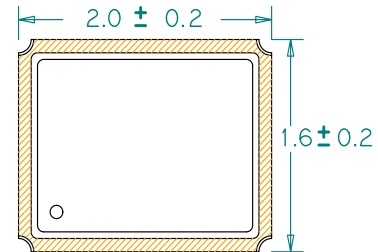
Aging at 25°C, First Year:

- ±3ppm Max

Reflow Temperature:

- 260°C Max, 10 seconds max

Package: (Dimensions are in mm)



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