

# Quartz Crystal Ceramic SMD

**FYQ**


5.0 x 3.2mm Ceramic SMD

## Product Features

- Rugged AT-cut crystal construction
- Miniature 5.0 x 3.2mm ceramic package
- Available on tape & reel; 12mm tape, 1000 units per reel
- Pb-free and RoHS/Green compliant

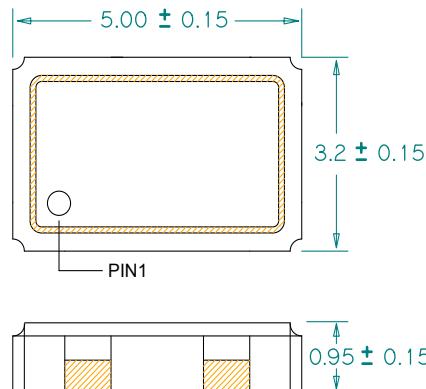
## Product Description

The 4-pad FY Series seam seal devices incorporate a sub-miniature AT-cut crystal resonator housed in a standard 5.0 x 3.2mm ceramic package. These compact crystal are ideal for surface mounting in densely populated PCB applications.

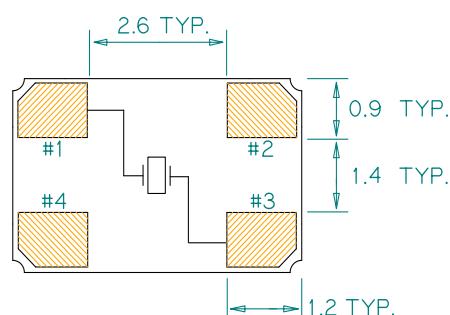
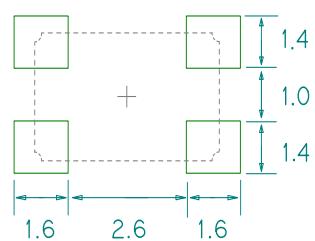
## Applications

- PCMCIA Cards
- Portable / hand-held PCs
- Notebook PC
- Wireless LAN
- Portable Multimedia Devices
- GPS
- HDD
- Bluetooth
- USB Dongle

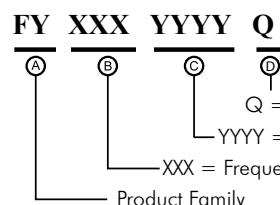
## Package: (Dimensions are in mm)



Recommended Land Pattern:



## Part Ordering Information:



YYY = Specification Code

Product Family

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

## Frequency Range:

- 8.0000 MHz to 59.9999 MHz (Fundamental)
- 60.0000 MHz to 125.0000 MHz (3rd Overtone)

## Characteristics at 25°C ±3°C:

- Frequency Calibration Tolerance: ±10ppm to ±50ppm
- Load Capacitance: 8 to 32pF or Series Resonance
- Effective Series Resistance (ESR):
  - Fundamental:
    - 8.0000MHz to 11.9999MHz: 100Ω max
    - 12.0000MHz to 15.9999MHz: 60Ω max
    - 16.0000MHz to 31.9999MHz: 50Ω max
    - 32.0000MHz to 59.9999MHz: 40Ω max
  - 3 Overtone:
    - 60.0000MHz to 79.9999MHz: 100Ω max
    - 80.0000MHz to 99.9999MHz: 80Ω max
    - 100.0000MHz to 125.0000MHz: 60Ω max
- Drive Level: 10µW typ. 100µW max
- Shunt Capacitance: 5pF Max.

## Temperature Range:

- Operating: -20 to +70°C; -40 to +85°C (AECQ Grade 3)
- Storage: -55 to +125°C

## Temperature Stability:

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

## Aging at 25°C, First Year:

- ±3ppm Max

## Reflow Temperature:

- 260°C Max, 10 seconds max

For the latest product information visit: <http://www.pericom.com/products/timing/crystals/FYQ>

For soldering reflow profile and reliability test ratings go to: <http://www.pericom.com/pdf/sre/reflow.pdf>

For tape and reel information go to: [http://www.pericom.com/pdf/sre/tr\\_5032\\_xo.pdf](http://www.pericom.com/pdf/sre/tr_5032_xo.pdf)