



**FW** Series Quartz Crystal 2.0 x 1.6mm

# **Miniature Quartz Crystal Ceramic SMD**





2.0 x 1.6mm Ceramic SMD

# **Product Description**

The 4-pad FW Series seam seal devices incorporate a ultra-miniature AT-cut crystal resonator housed in a standard 2.0 x 1.6mm ceramic package. These compact crystals are ideal for surface mounting in densely populated or small form-factor PCB applications.

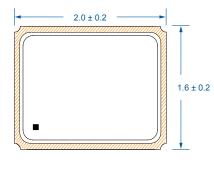
# **Product Features**

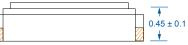
- Rugged AT-cut crystal construction
- Miniature 2.0 x 1.6mm ceramic package
- Available on tape & reel; 8mm tape, 3000 units per reel
- Pb-free and RoHS/Green compliant

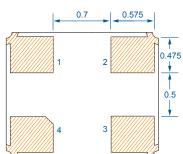
# **Typical Applications**

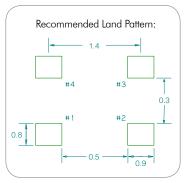
- Portable / Hand-held PCs
- PCMCIA Cards
- Notebook PC
- Bluetooth
- Wireless LAN
- UWB
- ZigBee
- USB
- GPS
- HDD
- GSM, CDMA, GPRS

# Package: (Scale: none; Dimensions are in mm)



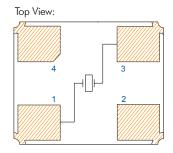




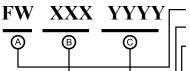


**Pin Functions:** 

Pin	Function
1	Xtal
2	Case
3	Xtal
4	Case



# **Part Ordering Information:**



A: Product Family B: XXX = Frequency Code C: YYYY = Specification Code

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

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FW Document Number DS40235 Rev 1-2 All specifications are subject to change without notice.

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# Miniature Quartz Crystal Ceramic SMD FW



A product Line of Diodes Incorporated

FW Series Quartz Crystal 2.0 x 1.6mm

### **Frequency Range:**

• 16 MHz to 66.0000 MHz (Fundamental)

## Characteristics at 25°C ±2°C:

- Frequency Calibration Tolerance: ±10ppm, ±20ppm, or ±30ppm
- Load Capacitance: 8 to 20pF or Series Resonance
- Effective Series Resistance (ESR):
  - $120\Omega$  max (16 to 26.0000 MHz)
  - 100Ω max (26 to 32.0000 MHz)
  - $80\Omega$  max (32 to 66.0000 MHz)
- Drive Level:  $10\mu$ W typ. ( $100\mu$ W max)
- Shunt Capacitance: 3pF Max

#### **Temperature Range:**

- Operating: -20 to +70°C or -30 to +85°C or -40to +125°C
- Storage: -40 to  $+125^{\circ}C$

#### Frequency Stability (Reference to the Frequency at 25°C):

- •-20 to +70°C:  $\pm$ 10ppm to  $\pm$ 50ppm
- •-30 to  $+85^{\circ}C$ :  $\pm 20$ ppm to  $\pm 50$ ppm
- •-40to +125°C: ±50ppm to ±70ppm

## Aging at 25°C, First Year:

- •±3ppm Max
- •±5ppm Max

#### **Reflow Temperature:**

•260°C Max, 10 seconds Max

#### Mechanical

- •Shock: JESD22-B104 Condition B
- •Solderability: J-STD-002
- •Terminal Strength: MIL-STD-883 Method 2004
- •Vibration: JESD22-B103
- •Solvent Resistance: JESD22-B107
- •Resistance to Soldering Heat: J-STD-020C Table 5-2 Pb-free devices (3 cycles max)

#### Environmental

- •Gross Test Leak: JESD22-A109, Condition C
- Fine Test Leak: JESD22-A109, Condition A1
- •Moisture Resistance: JESD22-A113
- •Insulation Resistance: 500 MΩ min (100 VDC)



单击下面可查看定价,库存,交付和生命周期等信息

>>Diodes Incorporated(达尔科技)