Miniature Quartz Crystal Ceramic SMD

F8

Product Description

The F8 2-pad Series incorporate a sub-miniature AT-cut strip crystal resonator housed in a 8x4.5 mm ceramic package. These compact crystals are ideal for surface mounting in densely-populated PCB applications.

Product Features

- Rugged AT-cut crystal construction
- Extremely compact SMD package
- Available on tape & reel; 16mm tape, 1000pcs per reel
- RoHS compliant

Typical Applications

- Ideally suited for disc drives, PCMCIA, PCs and hand-held products

Frequency Range:

- 6.0000 MHz to 48.0000 MHz (Fundamental)

Temperature Range:

- Operating: –20 to +70°C, -40 to +85°C
- Storage: –40 to +85°C

Temperature Stability Tolerance:

- ±10, ±20, ±30, ±50ppm, –20 to +70°C
- ±30, ±50ppm, –40 to +85°C
- Others available

Characteristics at 25°C ±2°C:

- Frequency Calibration Tolerance: ±10, ±20, ±30
- Load Capacitance: 8 to 32pF or Series Resonant
- Effective Series Resistance:
- Fundamental: 20 to 110Ω depending on frequency
- Drive Level: 10μW correlation, 500μW max
- Shunt Capacitance: 7pF max

Mechanical:

- Shock: ±5ppm max after 3 drops from 75cm onto a hard wooden board
- Solderability: JESD22-B102-D Method 2 (Preconditioning E)
- Vibration: ±5ppm max sine vibration 10~55Hz, sweep period 1-2 minutes, amplitude 1.5mm, 3 mutually perpendicular planes each 1 hour
- Solvent Resistance: MIL-STD-202, Method 215
- Resistance to Soldering Heat: J-STD-020C Table 5-2 Pb-free devices (3 cycles max)

Environmental:

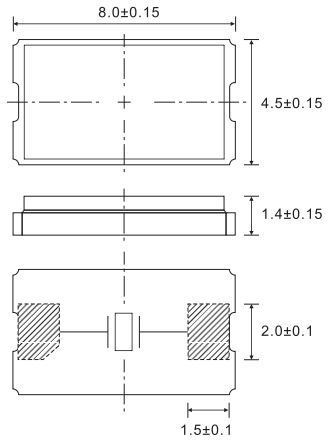
- Gross Test Leak: MIL-STD-883, Method 1014, Condition C
- Fine Test Leak: MIL-STD-883, Method 1014, Condition A2
- Thermal Shock: MIL-STD-883, Method 1011, Condition A
- Moisture Resistance: MIL-STD-883, Method 1004

Reflow Temperature:

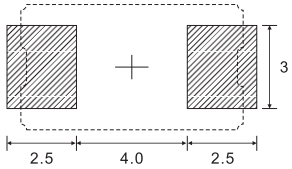
- 260°C Max, 10 sec max

Package Mechanicals

Package Details



Recommended Land Patterns



New Part Number Example

F8 (A) **163** (B) **0001** (C)

A = Product Family
B = Frequency Code
C = Specification Code

Note: After July 1, 2007, a Saronix - eCera part number following the above format will be assigned upon confirmation of exact customer requirements.