SaRonix-eCera™

US Series Quartz Crystal
1.6 x 1.2 x 0.30mm

Miniature Quartz Crystal Ceramic SMD

US

1.6 x 1.2mm Ceramic SMD

Product Features

- Rugged AT-cut crystal construction
- Miniature 1.6 x 1.2mm ceramic package
- Available on tape & reel; 8mm tape, 3000 units per reel
- Pb-free and RoHS/Green compliant

Product Description

The 4-pad US Series seam seal devices incorporate a ultra-miniature AT-cut crystal resonator housed in a standard 1.6 x 1.2mm ceramic package. These compact crystals are ideal for surface mounting in densely populated or small form-factor PCB applications.

Typical Applications

- Smart Phone
- Portable / Hand-held PCs
- PCMCIA Cards
- Notebook PC
- Bluetooth
- Wireless LAN
- SIP
- RF-SIM
- Pin Drive
- SD Module

Frequency Range:

- 26.000000 MHz to 66.000000 MHz (Fundamental)

Characteristics at 25°C ±2°C:

- Frequency Calibration Tolerance: ±10ppm, to ±50ppm
- Load Capacitance: 8 to 20pF or Series Resonance
- Equivalent Series Resistance (ESR):
  100Ω max (26.000000 to 40.000000 MHz)
  80Ω max (40.000001 to 66.000000 MHz)
- Drive Level: 10μW typ. (100μW max)
- Shunt Capacitance: 3pF Max

Temperature Range:

- Operating: –20°C to +70°C or –30°C to +85°C
- Storage: –40°C to +85°C

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

- –20°C to +70°C: ±10ppm, to ±50ppm
- –30°C to +85°C: ±20ppm, to ±50ppm

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
- 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)

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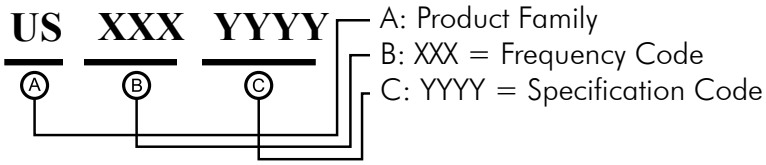
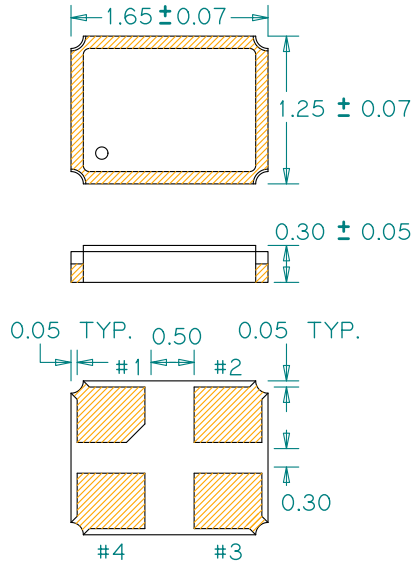
Part Ordering Information:



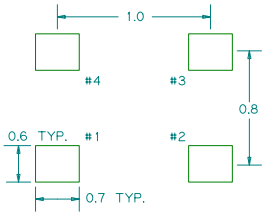
Following the above format, Saronix-eCera part numbers will be assigned upon confirmation of exact customer requirements.

Mechanical Drawings:



Scale: None, Dimensions in mm

Recommended Land Pattern:



UNIT: mm

Pin Functions:

Pin	Function
1	Xtal
2	Case
3	Xtal
4	Case