

CFSS-3 SPREAD SPECTRUM CLOCK OSCILLATORS

ISSUE 3; 1 NOVEMBER 2008 - RoHS 2002/95/EC

Description

- Spread spectrum surface mount oscillators in a ceramic package with a hermetically sealed metal lid

Package Outline

- 5 x 3.2mm

Frequency Range

- 12 to 168MHz

Output Compatibility & Load

- Tri-state CMOS
- Drive Capability 15pF max

Frequency Stability (averaged frequency)

- ±50ppm (inclusive of tolerance, supply voltage and output load variations over the operating temperature range)

Operating Temperature Range

- 10 to 70°C

Storage Temperature Range

- 40 to 85°C

Tri-state Operation

- Logic '1' to pad 1 (>80% Vs) enables oscillator output
- Logic '0' to pad 1 (<20% Vs) disables oscillator output, the oscillator output goes to a high impedance state.
- No connection to pad 1 enables oscillator outputs

Modulation Ratios

- Centre Spread ±0.5%, ±1%, ±2%
- Down Spread -1%, -2%, -4%

Cycle to Cycle Jitter 1σ

- 12MHz to <20MHz 200ps max
- 20MHz to 168MHz 100ps max

Ageing

- ±5ppm max / year

Environmental

- Drop: natural drop, 3 times, from 100cm onto a hard wooden plate (30mm thick)
- Vibration: 10 to 55Hz, 1.5mm displacement (10Hz-36Hz), 4G (36Hz-55Hz) sweep time 1min/oct, duration 2hrs for each X, Y & Z axes

Marking Includes

- Model Number + Frequency

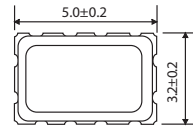
Packaging

- Bulk or Tape and Reel

Minimum Order Information Required

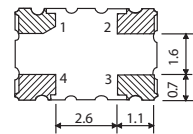
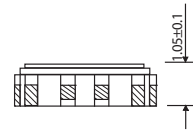
- Frequency + Model Number + Modulation Ratio + Frequency Stability Code

Outline (mm)

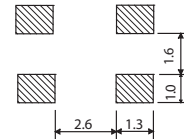


Pad Connections

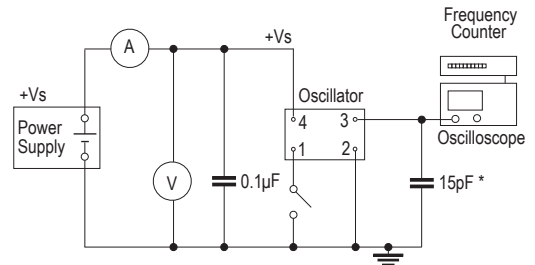
- 1.Enable/Disable
- 2.GND
- 3.Output
- 4.+Vs



Solder Pad Layout



Test Circuit



* Inclusive of jiggig and equipment capacitance

Example Output Spectrum

