

CFPT-37

ISSUE 2 ; 19 OCTOBER 2004

Delivery Options

- Please contact our sales office for details

Package Outline

- 7.0 x 5.0 x 2.0mm SMD

Description

- CFPT-37 is a fixed frequency, surface mount, temperature compensated crystal oscillator providing a high degree of frequency stability over a wide temperature range

Supply Voltage

- 3.3V ± 0.3V

Frequency Stability

- Temperature ±0.9ppm
- Supply Voltage Variation ±0.3ppm *
- Load Variation ±0.2ppm
- After Reflow ±1.0ppm
- Calibration Tolerance @ 25°C ±1.0ppm
- * Supply Voltage Variation :
 ≥30.0MHz to <40.0MHz, ±0.4ppm
 ≥40.0MHz, ±0.5ppm

Operating Temperature Range

- -20 to 70°C

Supply Current

- 3mA @ 20MHz typical

Output Compatibility

- HCMOS
- Load: 15pF nom.
- VoL: <10% Vs
- VoH: >90% Vs
- Duty Cycle: 45/55%
- Rise Time: 8ns
- Fall Time: 8ns

Ageing

- ±1ppm / year typical in 1st year @ 25°C

Standard Frequencies

- 10, 12.8, 13.0, 14.4, 16.32, 16.384, 19.44, 20.0, 26.0, 32.768, 40.0MHz

Other frequencies may be available, please contact our sales office

Marking

- CMAC and Batch Code
- 37 + Frequency Code + Date Code

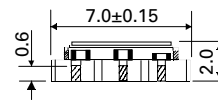
Minimum Ordering Information Required

- Frequency + Model Number (example 10.0MHz CFPT-37)

Environmental Specification

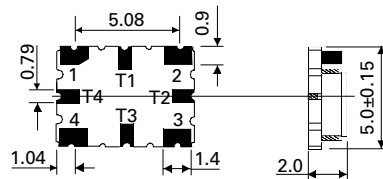
- Storage Temperature Range -55 to 125°C
- Vibration: IEC 60068-2-6 Test Fc Procedure B4, 10-60Hz 1.5mm displacement, at 98.1m/s², 30 minutes in each of three mutually perpendicular axes at 1 octave per minute
- Shock: IEC 60068-2-27 Test Ea, 980m/s² acceleration for 6ms duration, 3 shocks in each direction along three mutually perpendicular axes
- Solderability: MIL-STD-202, Method 208, Category 3

Outline in mm

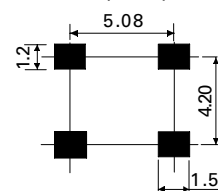


Pad Connections

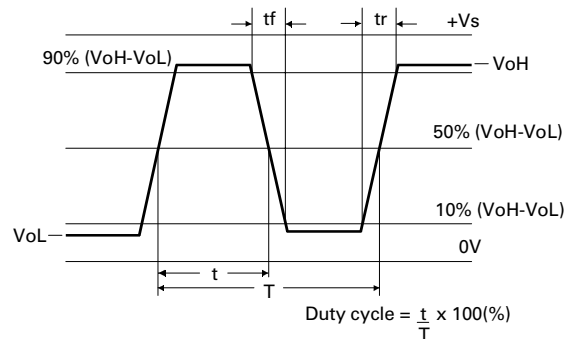
- 1.N/C
 - 2.GND
 - 3.Output
 - 4.+Vs
- T1, T2, T3, T4 N/C



Solder pad layout



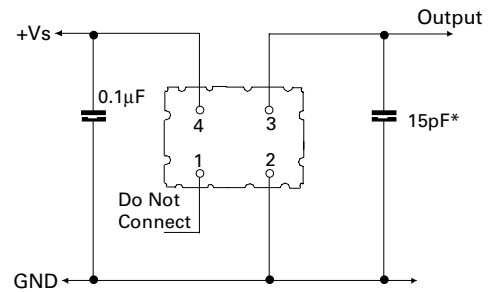
Output Waveform



Manufacturing Information

- Soldering: SMD product suitable for Convection Reflow soldering. Peak temperature 260°C. Maximum time above 220°C, 60s
- Washing: Able to withstand aqueous washing process.
- Packaging: Tape and reel, details available on request.

Test Circuit



* inclusive of probe and jig capacitance