# **CFPT-127**

# ISSUE 1 ; 14 JANUARY 2005

#### **Delivery Options**

Please contact our sales office for details

#### **Package Outline**

■ 5.0 x 3.2 x 1.6mm SMD (surface mount device)

# Description

 CFPT-127 is a lead free surface mount temperature compensated crystal oscillator (TCXO) providing a high degree of frequency stability over a wide temperature range and is suitable for GPS applications.

#### Supply Voltage

■ 3V ± 10%

# Frequency Stability

- Temperature ±0.5ppm (code E)
- Supply Voltage Variation ±0.2ppm
- Load Variation (10kΩ // 10pF) ±0.2ppm
- After Reflow ±1.0ppm

### **Operating Temperature Range**

# ■ -40 to 85°C (code X)

# Supply Current

2mA @ 20MHz typical

#### **Output Compatibility**

- Clipped Sinewave DC-Coupled
- 10kΩ // 10pF
- Level ≥ 0.8 Vpk-pk

#### Ageing

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

### Standard Frequencies (MHz)

16.32, 16.8, 19.2, 24.5535, 26.0, 33.6MHz
 Other frequencies may be available, please contact our sales office.

# Marking

- CMAC and Batch Code
- Stab/Temp code + Frequency Code + Date Code

### **Minimum Ordering Information Required**

Frequency + Model Number (Example 24.5535MHz CFPT-127)

# **Environmental Specification**

- Storage Temperature Range -55 to 125°C
- Vibration: IEC 60068-2-6 Test Fc Procedure B4, 10-60Hz
  1.5mm displacement, at 98.1 m/s<sup>2</sup>, 30 minutes in each of three mutually perpendicular axes at 1 octave per minute
- Shock: IEC 60068-2-27 Test Ea, 980 m/s<sup>2</sup> 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



#### Manufacturing Information

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

# Test Circuit



 $*10 k\Omega\,//$  10pF (Clipped Sinewave), inclusive of probe and jig capacitance.

