

ISSUE 5; April 2016

**Description**

- Surface mount temperature compensated crystal oscillator (TCXO) providing a high degree of frequency stability over a wide temperature in a hermetically sealed ceramic package and is suitable for GPS applications

**Frequency Parameters**

- Frequency: 16.32MHz to 33.6MHz
- Frequency Stability:  $\pm 0.50$ ppm
- Ageing:  $\pm 1$ ppm typical in 1st year @25°C

**Electrical Parameters**

- Supply Voltage: 3.0V  $\pm 10\%$
- Current Draw (Typical): 2mA @ 20MHz
- Supply Voltage Variation:  $\pm 0.2$ ppm
- Load Variation:  $\pm 0.2$ ppm (10k $\Omega$  // 10pF) After Reflow:  $\pm 1.0$ ppm

**Operating Temperature Ranges**

- 40 to 85°C

**Output Details**

- Output Compatibility: Clipped Sine
- Drive Capability: 10k $\Omega$  // 10pF
- Output Waveform: 0.8 Vpk-pk min, DC-Coupled

**Environmental Parameters**

- Shock: IEC 60068-2-27, Test Ea: 980m/s<sup>2</sup> acceleration for 6ms, 3 shocks in each of 3 mutually perpendicular planes
- Vibration: IEC 60068-2-6, Test Fc, Procedure B4: 10Hz-60Hz 1.5mm displacement, 60-2000Hz at 98.1m/s<sup>2</sup>, 30mins in 3 mutually perpendicular planes at 1 oct/min
- Solderability: MIL-STD-202, Method 208, Category 3
- Storage Temperature Range: -55 to 125°C

**Manufacturing Details**

- Soldering: Suitable for Convection Reflow soldering. Peak temperature 260°C for 10sec max
- Washing: Able to withstand aqueous washing

**Ordering Information**

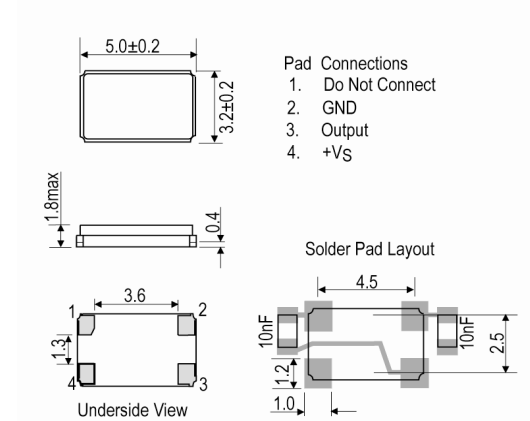
- Frequency\*
- Model\*
- Output
- Frequency Stability (over operating temperature range)\*
- Operating Temperature Range\*
- Supply Voltage
- Example  
26.0MHz CFPT-127  
Clipped Sine  $\pm 0.5$ ppm -40 to 85C 3V

**Compliance**

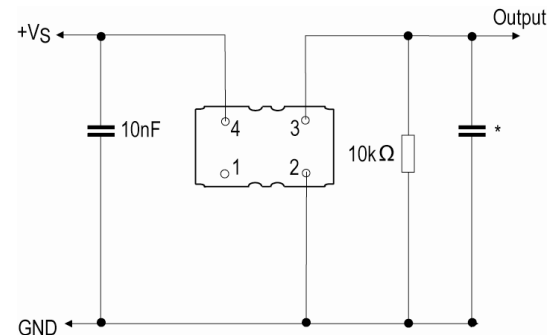
- RoHS Status (2011/65/EU): Compliant
- REACH Status: Compliant
- MSL Rating (JDEC-STD-033): Not Applicable



**Outline (mm)**



**Test Circuit**



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

**Sales Office Contact Details:**

UK: +44 (0)1460 270200  
Germany: 0800 1808 443

France: 0800 901 383  
USA: +1.760.318.2824

Email: [info@iqdfrequencyproducts.com](mailto:info@iqdfrequencyproducts.com)  
Web: [www.iqdfrequencyproducts.com](http://www.iqdfrequencyproducts.com)

#### Packaging Details

- Pack Style: Cutt      In tape, cut from a reel  
Pack Size: 1
- Pack Style: Bulk      Loose in bulk pack  
Pack Size: 100
- Pack Style: Reel      Tape & reel in accordance with EIA-481-D  
Pack Size: 1,000

#### Electrical Specification - maximum limiting values 3.0V ±10%

Frequency Min	Frequency Max	Temperature Range	Stability (Min)	Current Draw	Rise and Fall Time	Duty Cycle
		°C	ppm	mA	ns	%
16.32MHz	16.32MHz	-40 to 85	±0.5	-	-	-
16.8MHz	16.8MHz	-40 to 85	±0.5	-	-	-
19.2MHz	19.2MHz	-40 to 85	±0.5	-	-	-
24.5535MHz	24.5535MHz	-40 to 85	±0.5	-	-	-
26.0MHz	26.0MHz	-40 to 85	±0.5	-	-	-
33.6MHz	33.6MHz	-40 to 85	±0.5	-	-	-

*This document was correct at the time of printing; please contact your local sales office for the latest version.*

[Click to view latest version on our website.](#)

#### Sales Office Contact Details:

UK: +44 (0)1460 270200  
Germany: 0800 1808 443

France: 0800 901 383  
USA: +1.760.318.2824

Email: [info@iqdfrequencyproducts.com](mailto:info@iqdfrequencyproducts.com)  
Web: [www.iqdfrequencyproducts.com](http://www.iqdfrequencyproducts.com)