



ISSUE 10; July 2012 - RoHS 2011/65/EU

Description

- Surface mount temperature compensated voltage controlled oscillator (TCVCXO) providing a high degree of frequency stability over a wide temperature range in a hermetically sealed ceramic package

Frequency Range

- Frequency 10.00 to 40.00MHz

Supply Voltage

- Voltage 3.3V $\pm 5\%$

Ageing

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

Output Compatibility & Load

- Output Compatibility HCMOS
- Drive Capability 15pF (nominal)

Frequency Stabilities

- Frequency Stability ± 0.9 ppm

Operating Temperature Ranges

- -20 to 70°C

Electrical Parameters

- Supply current typical at 20MHz
- Supply Voltage Variation
 - <30MHz ± 0.3 ppm
 - 30MHz to <40MHz ± 0.4 ppm
 - 40MHz ± 0.5 ppm
- Load Variation: ± 0.2 ppm (@15pF $\pm 10\%$)
 - After Reflow: ± 1.0 ppm

Environmental Parameters

- Shock: IEC 60068-2-27, Test Ea: 980m/s² 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/s², 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

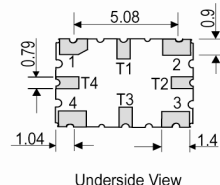
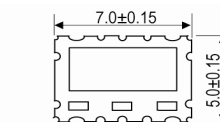
Manufacturing Details

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

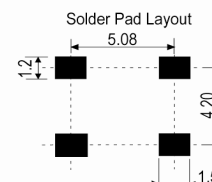
Ordering Information (*minimum required)

- Frequency*
 - Model*
 - Output
 - Frequency Stability (over operating temperature range)
 - Operating Temperature Range
 - Supply Voltage
 - Frequency Adjustment
- Example
 - 10.0MHz CFPT-125
 - HCMOS ± 0.9 ppm -20 to 70C 3.3V ± 5 ppm min

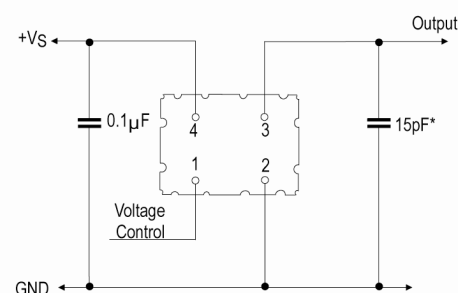
Outline (mm)



Pad Connections
 1. Voltage Control
 2. GND
 3. Output
 4. +Vs
 T1, T2, T3, T4,
 Do Not Connect



Test Circuit



* Inclusive of probe and jig capacitance

Sales Office Contact Details:

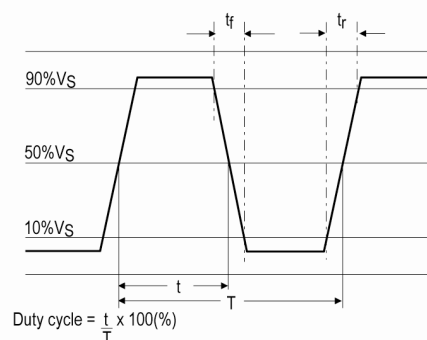
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**Packing Details**

- Pack Style: **Bulk** Loose in bulk pack
Pack Size 100
- Pack Style: **Reel** Tape and reel in accordance with EIA-481-D
Pack Size 500
- Alternative packing options available

Output Waveform**Electrical Specification - maximum limiting values 3.3V ±5%**

Developed Frequencies	Operating Temp Range	Frequency Stability	Current Draw	Rise & Fall	Duty Cycle %
10.00MHz	-20 to 70°C	±0.90ppm	3.0mA	8ns	45/55%
12.80MHz	-20 to 70°C	±0.90ppm	3.0mA	8ns	45/55%
13.00MHz	-20 to 70°C	±0.90ppm	3.0mA	8ns	45/55%
14.40MHz	-20 to 70°C	±0.90ppm	3.0mA	8ns	45/55%
16.32MHz	-20 to 70°C	±0.90ppm	3.0mA	8ns	45/55%
16.38MHz	-20 to 70°C	±0.90ppm	3.0mA	8ns	45/55%
19.44MHz	-20 to 70°C	±0.90ppm	3.0mA	8ns	45/55%
20.00MHz	-20 to 70°C	±0.90ppm	3.0mA	8ns	45/55%
26.00MHz	-20 to 70°C	±0.90ppm	3.0mA	8ns	45/55%
32.77MHz	-20 to 70°C	±0.90ppm	3.0mA	8ns	45/55%
40.00MHz	-20 to 70°C	±0.90ppm	3.0mA	8ns	45/55%

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

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