


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
- Model CFPT-125
- Model Issue number 10

Frequency Parameters

- Frequency 20.0MHz
- Frequency Stability $\pm 0.90\text{ppm}$
- Operating Temperature Range -20.00 to 70.00°C
- Ageing $\pm 1\text{ppm}$ typical in 1st year
@25°C

Electrical Parameters

- Supply Voltage 3.3V $\pm 5\%$
- Current Draw 3.00mA
- Supply current typical at 20MHz
- Supply Voltage Variation
 <30MHz $\pm 0.3\text{ppm}$
 30MHz to <40MHz $\pm 0.4\text{ppm}$
 40MHz $\pm 0.5\text{ppm}$
- Load Variation: $\pm 0.2\text{ppm}$ (@15pF $\pm 10\%$)
 After Reflow: $\pm 1.0\text{ppm}$

Frequency Adjustment

- Pulling $\pm 5\text{ppm}$ min
- Control Voltage 1.65V $\pm 1.0\text{V}$

Output Details

- Output Compatibility HCMOS
- Drive Capability 15pF (nominal)
- Rise and Fall Time 8.0ns max
- Duty Cycle 45/55%

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

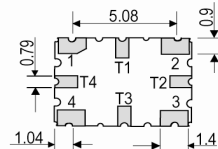
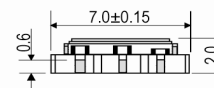
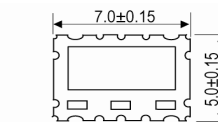
- Soldering: Suitable for Convection Reflow soldering. Peak temperature 260°C for 10sec max
- Washing: Able to withstand aqueous washing

Compliance

- RoHS Status (2011/65/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): 1

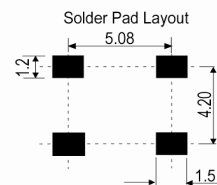
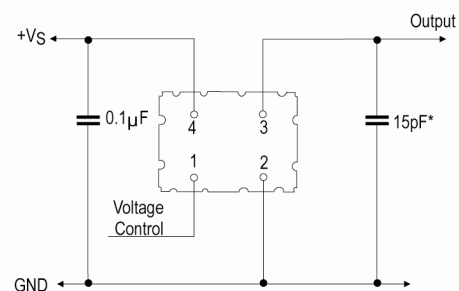
Packaging Details

- Pack Style: Bulk Loose in bulk pack
- Pack Size: 100


Outline (mm)


Underside View

- 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:

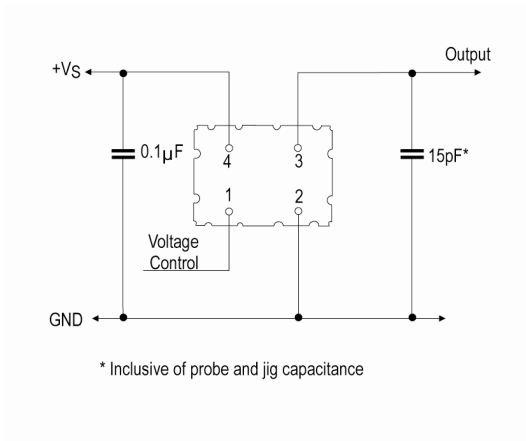
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 Germany: 0800 1808 443

 France: 0800 901 383
 USA: +1.760.318.2824

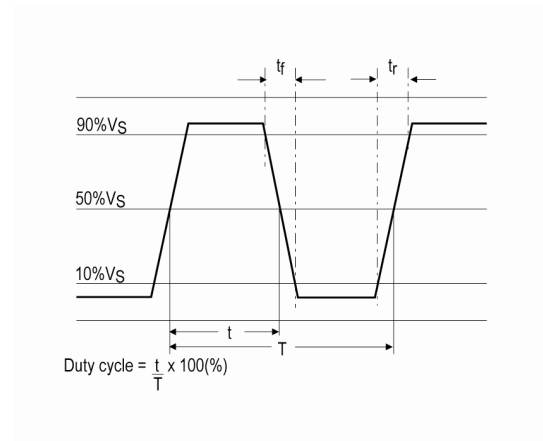
 Email: info@iqdfrequencyproducts.com
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- Alternative packing option available

Test Circuit



Wave Form



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