Customer Part:

Description

- Surface mount temperature compensated voltage controlled oscillator (VCTCXO) 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   16.3840MHz
- Frequency Stability   ±0.90ppm
- Operating Temperature Range   -20.00 to 70.00°C
- Ageing   ±1ppm typical in 1st year @25°C

Electrical Parameters

- Supply Voltage   3.3V ±5%
- Current Draw   3.000mA
- Supply current typical at 20MHz
- Supply Voltage Variation
  <30MHz ±0.3ppm
  30MHz to <40MHz ±0.4ppm
  40MHz ±0.5ppm
- Load Variation: ±0.2ppm (@15pF ±10%)
  After Reflow: ±1.0ppm

Frequency Adjustment

- Pulling   ±5ppm min
- Control Voltage   1.65V ±1.0V

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
- RoHS Terminations   NiCoAu
- RoHS Reflow Temp   260degC 30s

Compliance

- RoHS Status (2015/863/EU)   Compliant
- REACh Status   Compliant
- MSL Rating (JDEC-STD-033):   1

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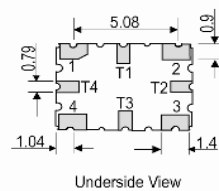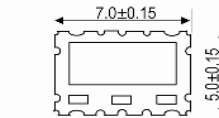
Pad Connections
1. Voltage Control
2. GND
3. Output
4. +Vs
T1, T2, T3, T4, Do Not Connect

Underside View

Solder Pad Layout
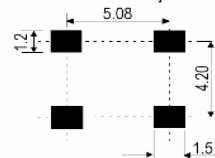
Test Circuit
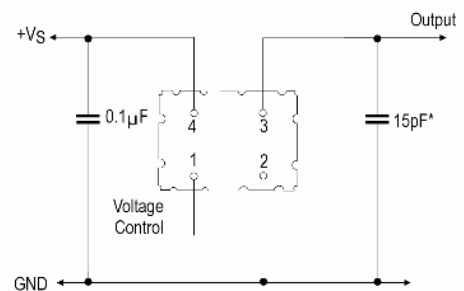
* Inclusive of probe and jig capacitance
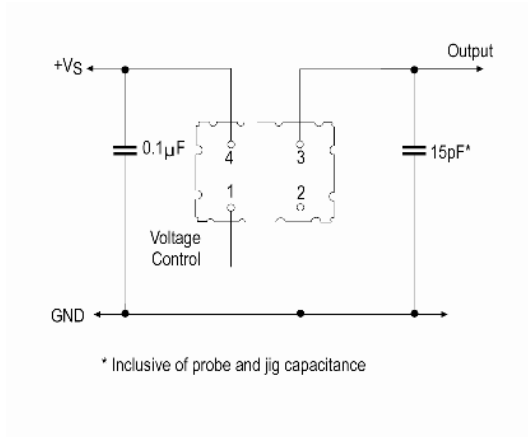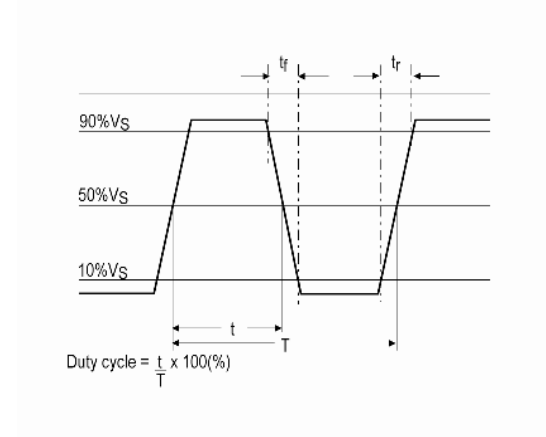
Sales Office Contact Details:

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USA: +1.760 668 8935

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Web: www.iqdfrequencyproducts.com

Customer Part:

Packaging Details

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

- *Alternative packing option available*

Test Circuit

* Inclusive of probe and jig capacitance

Wave Form

Duty cycle = $\frac{t}{T} \times 100(\%)$