



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: 11

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

Frequency Adjustment

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

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/s^2 acceleration for 6ms, 3 shocks in each of 3 mutually perpendicular planes
- Vibration: IEC 60068-2-6, Test Fc, Procedure B4: $10\text{Hz}-60\text{Hz}$ 1.5mm displacement, $60-2000\text{Hz}$ at 98.1m/s^2 , 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

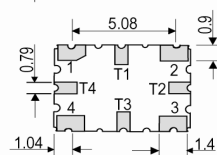
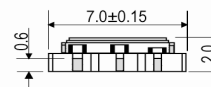
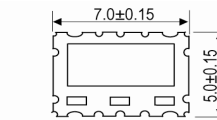
- Soldering: Suitable for Convection Reflow soldering. Peak temperature 260°C for 10sec max
- Washing: Able to withstand aqueous washing
- RoHS Terminations: NiCoAu
- RoHS Reflow Temp: 260degC 30s

Compliance

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

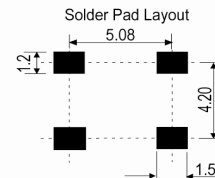


Outline (mm)

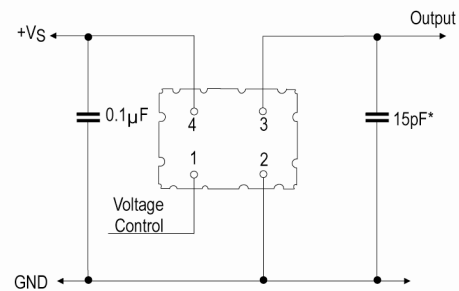


Underside View

- Pad Connections
- Voltage Control
 - GND
 - Output
 - +Vs
- T1, T2, T3, T4,
Do Not Connect



Test Circuit



* Inclusive of probe and jig capacitance

Sales Office Contact Details:

UK: +44 (0)1460 270200

Email: info@iqdfrequencyproducts.com

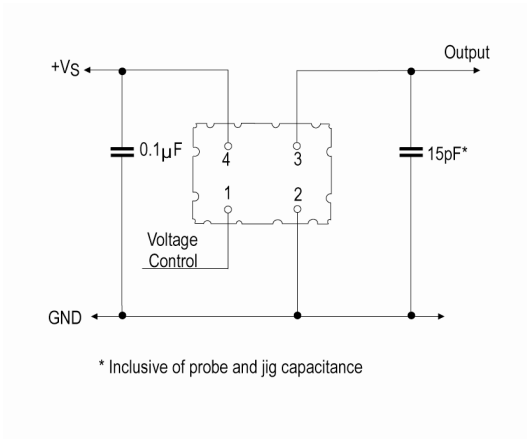
Web: www.iqdfrequencyproducts.com

Packaging Details

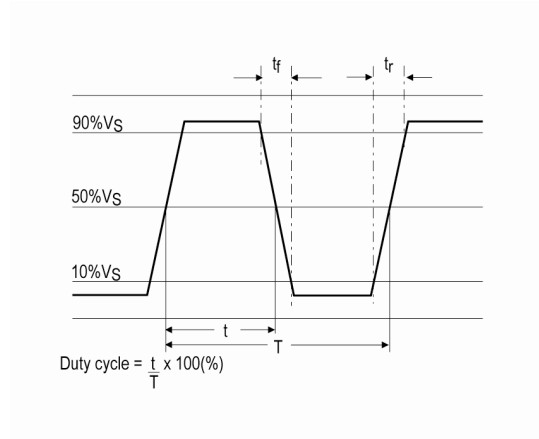
- Tape & reel in accordance with EIA-481
Quantities below the standard reel size to be supplied on cut tape

Standard Pack Quantity: 1,000

Test Circuit



Wave Form



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