

ISSUE 9; April 2016

Description

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



Frequency Parameters

- Frequency: 10.0MHz to 40.0MHz
- Frequency Tolerance: $\pm 1.00\text{ppm}$
- Frequency Stability: $\pm 0.90\text{ppm}$
- Ageing: $\pm 1\text{ppm}$ typ in 1st year @ 25°C

Electrical Parameters

- Supply Voltage: 3.3V $\pm 0.3\text{V}$
- Supply Voltage Variation (@ $\pm 5\%$ change):
 <30MHz $\pm 0.3\text{ppm}$
 30MHz to <40MHz $\pm 0.4\text{ppm}$
 40MHz $\pm 0.5\text{ppm}$
- Load Variation (@ $\pm 10\%$ change): $\pm 0.2\text{ppm}$
- Variation After Reflow: $\pm 1.0\text{ppm}$

Operating Temperature Ranges

- 20 to 70°C

Output Details

- Output Compatibility: HCMOS
- Drive Capability: 15pF nom

Environmental Parameters

- Storage Temperature Range: -55 to 125°C
- 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 1oct/min
- Solderability: MIL-STD-202, Method 208, Category 3

Manufacturing Details

- Soldering: Suitable for Convection Reflow soldering, peak temperature 260°C for 10secs max
- Washing: Able to withstand aqueous washing

Ordering Information

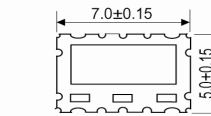
- Frequency*
Model*
Output
Frequency Stability (over operating temperature range)
Operating Temperature Range
Supply Voltage
(*minimum required)
- Example
40.0MHz CFPT-37
HCMOS $\pm 0.9\text{ppm}$ -20 to 70C 3.3V

Compliance

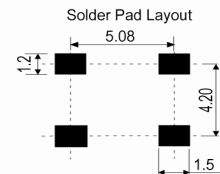
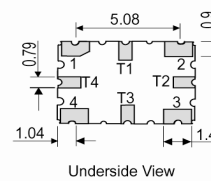
- RoHS Status (2011/65/EU): Compliant
- REACH Status: Compliant
- MSL Rating (JDEC-STD-033): Not Applicable



Outline (mm)



- Pad Connections
- 1.N/C
 - 2.GND
 - 3.Output
 - 4.+Vs
 - T1, T2, T3, T4 N/C



Sales Office Contact Details:

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

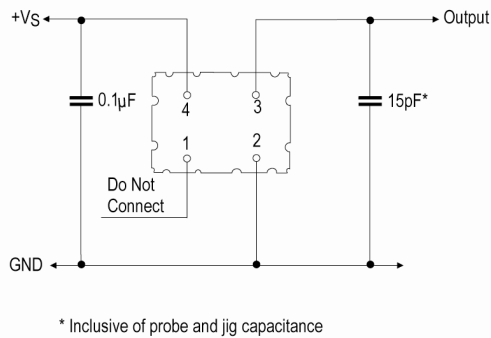
France: 0800 901 383
USA: +1.760.318.2824

Email: info@iqdfrequencyproducts.com
Web: www.iqdfrequencyproducts.com

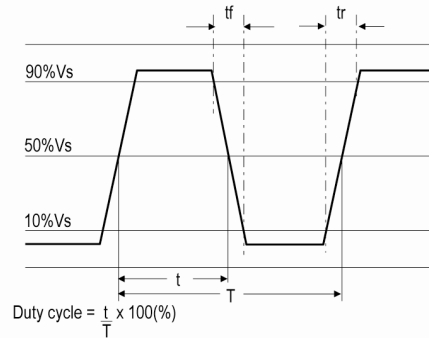
Packaging Details

- Pack Style: Bulk Loose in bulk pack
Pack Size: 100
- Pack Style: Cutt In tape cut from a reel
Pack Size: 1
- Pack Style: Reel Tape & reel in accordance with EIA-481-D
Pack Size: 500

Test Circuit



Wave Form



Electrical Specification - maximum limiting values 3.3V ±0.3V

Frequency Min	Frequency Max	Temperature Range	Stability (Min)	Current Draw (typ)	Rise and Fall Time	Duty Cycle
		°C	ppm	mA	ns	%
10.0MHz	10.0MHz	-20 to 70	±0.9	3	8	45/55%
12.8MHz	12.8MHz	-20 to 70	±0.9	3	8	45/55%
13.0MHz	13.0MHz	-20 to 70	±0.9	3	8	45/55%
14.4MHz	14.4MHz	-20 to 70	±0.9	3	8	45/55%
16.32MHz	16.32MHz	-20 to 70	±0.9	3	8	45/55%
16.384MHz	16.384MHz	-20 to 70	±0.9	3	8	45/55%
19.44MHz	19.44MHz	-20 to 70	±0.9	3	8	45/55%
20.0MHz	20.0MHz	-20 to 70	±0.9	3	8	45/55%
26.0MHz	26.0MHz	-20 to 70	±0.9	3	8	45/55%
32.768MHz	32.768MHz	-20 to 70	±0.9	3	8	45/55%
40.0MHz	40.0MHz	-20 to 70	±0.9	3	8	45/55%

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
Web: www.iqdfrequencyproducts.com