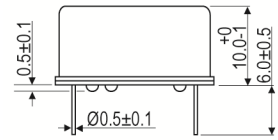


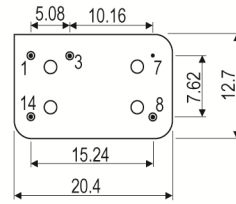
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### Outline (mm)



Pin Connections  
 1. Voltage Control  
 3. Do not connect, factory use only  
 7. GND  
 8. Output  
 14. +VS



Underside View

### Description

- Oven Controlled Crystal Oscillator in a 14-pin DIL package featuring very low frequency stability options and a wide operating temperature range. Please note, this document is intended to illustrate the general capability and versatility of IQD's OCXOs. For specific enquiries please contact one of IQD's sales offices where we can tailor a unique specification to meet your needs.

### Frequency Parameters

- Frequency 5.0MHz to 100.0MHz
- Frequency Stability  $\pm 5.00\text{ppb}$  to  $\pm 200.00\text{ppb}$
- Ageing  $\pm 100\text{ppb}$  max in 1st year @ 25°C

### Electrical Parameters

- Supply Voltage 3.3V  $\pm 5\%$
- Warm-Up Power Consumption: 2W max
- Stable Power Consumption: 0.6W max
- Warm-Up Time: 1min max

### Frequency Adjustment

- Pulling  $\pm 1000\text{ppb}$  min to  $\pm 2000\text{ppb}$
- Voltage Control: 1.65V  $\pm 1.65\text{V}$

### Operating Temperature Ranges

- -20 to 75°C
- -40 to 75°C
- -40 to 85°C

### Output Details

- Output Compatibility HCMOS
- Drive Capability 15pF  $\pm 5\%$

### Sales Office Contact Details:

UK: +44 (0)1460 270200  
 USA: +1.760.318.2824

Email: [info@iqdfrequencyproducts.com](mailto:info@iqdfrequencyproducts.com)  
 Web: [www.iqdfrequencyproducts.com](http://www.iqdfrequencyproducts.com)

### Noise Parameters

- Phase Noise (typical @ 10MHz):
  - 85dBc/Hz @ 10Hz
  - 130dBc/Hz @ 100Hz
  - 150dBc/Hz @ 1kHz
  - 155dBc/Hz @ 10kHz
  - 160dBc/Hz @ 100kHz
  - 160dBc/Hz @ 1MHz
- Harmonics: -40dBc max

### Environmental Parameters

- Storage Temperature Range: -55 to 105°C
- Shock: IEC 68-2-27 Test Ea, Severity 50A. 50G, 11ms, 1/2 sinewave, 3 times in each axis X, Y, Z.
- Vibration: IEC 68-2-06 Test Fc. 10G, 10Hz-500Hz, one cycle per 30min, test 2 hour (3 times in each axis, X, Y, Z).

### Ordering Information

- Minimum required\*
  - Frequency\*
  - Model\*
  - Supply Voltage
  - Output
  - Frequency Stability (over operating temperature range)\*
  - Operating Temperature Range\*

### Compliance

- RoHS Status (2015/863/EU)      Compliant
- REACH Status                      Compliant
- MSL Rating (JDEC-STD-033):    Not Applicable

### Packaging Details

- Pack Style: Bulk      Bulk pack
- Pack Size: 1

### Electrical Specification - maximum limiting values 3.3V ±5%

Frequency Min	Frequency Max	Temperature Range	Stability (Min)	Current Draw	Rise and Fall Time	Duty Cycle
		°C	ppb	mA	ns	%
5.0MHz	100.0MHz	-20 to 75	±5.0	-	-	-
		-40 to 75	±5.0	-	-	-
		-40 to 85	±10.0	-	-	-

*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.](#)

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