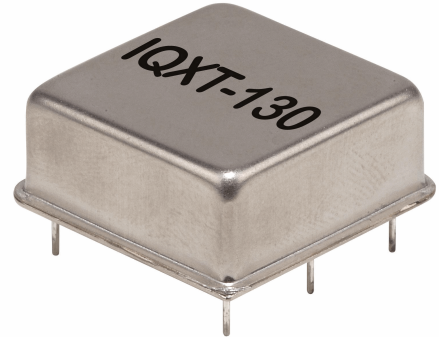


ISSUE 1; October 2015

Description

- Please note: This document is intended to illustrate the general capability and versatility of IQD's design. For specific enquiries please contact one of IQD's sales offices where we can tailor a unique specification to meet your needs.
- Hermetically sealed temperature compensated crystal oscillator.
- Tuning range also available.



Frequency Parameters

- Frequency: 1.0MHz to 800.0MHz
- Frequency Stability: $\pm 0.28\text{ppm}$ to $\pm 2.00\text{ppm}$
- Ageing (typical): $\pm 1\text{ppm}$ in the first year, $\pm 3\text{ppm}$ after 10 years
- Frequency Stability Options:
 - $\pm 0.28\text{ppm}$ max
 - $\pm 0.5\text{ppm}$ max
 - $\pm 1.0\text{ppm}$ max
 - $\pm 1.5\text{ppm}$ max
 - $\pm 2.0\text{ppm}$ max
- Other combinations possible please contact Sales office
- Typical Frequency vs Supply Voltage Change:
 - $V_s \pm 5\% = \pm 0.1\text{ppm}$ max
- Typical Frequency vs Load Change:
 - $15\text{pF} \pm 10\% = \pm 0.2\text{ppm}$

Electrical Parameters

- Supply Voltage: 5.0V
- Supply Voltage: Available in 5.0V and 3.3V (Lower than 3.3V is available on request)
- Typical Supply Current Draw (HCMOS):

Frequency	Current draw
@1.0kHz	5mA
@40.0MHz	30mA
@800.0MHz	100mA

Frequency Adjustment

- Frequency Adjustment Range options:
 - $\pm 5\text{ppm}$ min
 - $\pm 10\text{ppm}$ min
 - $\pm 20\text{ppm}$ min (limited availability)
 - No pulling option
- Control Voltage Range:
 - For 3.3V supply = $1.65\text{V} \pm 1.5\text{V}$
 - For 5.0V supply = $2.5\text{V} \pm 2.0\text{V}$

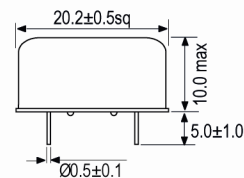
Operating Temperature Ranges

- 10 to 60°C
- 20 to 70°C
- 40 to 85°C

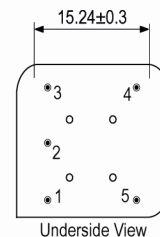
Output Details

- Output Compatibility: HCMOS/Sinewave
- Sinewave Output Level:
 - @3.3V 0dBm typ
 - @5.0V 0dBm typ
- HCMOS Output Level:
 - $V_{OH} = >90\%$ V_s
 - $V_{OL} = < 10\%$ V_s
 - Duty Cycle = 40/60%
 - Rise and fall time = 10ns max

Outline (mm)



Pin Connections
 1. +Vs
 2. Output
 3. GND
 4. Voltage Control
 5. GND



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

Noise Parameters

- Typical Phase Noise Figures @ 20.0MHz:
Offset Typical
10Hz -80dBc
100Hz -120dBc
1kHz -140dBc
10kHz -150dBc
100kHz -155dBc

Environmental Parameters

- Storage Temperature Range: -55 to 125°C
- Shock: MIL-STD-883C, Method 2002, Condition B
- Vibration: MIL-STD-883C, Method 2007, Condition A

Ordering Information

- Minimum Enquiry Information:
Frequency
Model
Supply Voltage
Output
Frequency Stability (over operating temperature range)
Operating Temperature Range
Frequency Adjustment

Compliance

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

Packaging Details

- Pack Style: Bulk Supplied tube or box packaging
Pack Size: 80

Electrical Specification - maximum limiting values 5.0V

Frequency Min	Frequency Max	Temperature Range	Stability (Min)	Current Draw	Rise and Fall Time	Duty Cycle
		°C	ppm	mA	ns	%
1.0MHz	800.0MHz	-10 to 60	±0.28	-	-	-
		-20 to 70	±0.28	-	-	-
		-40 to 85	±0.28	-	-	-

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