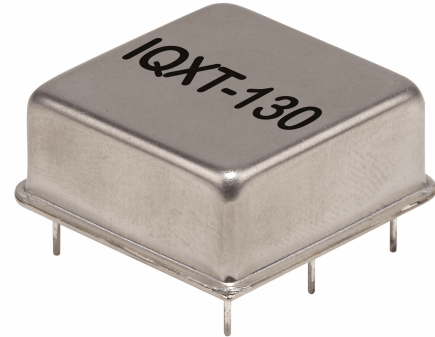


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**Description**

- 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 =  $2.5\text{V} \pm 2.0\text{V}$

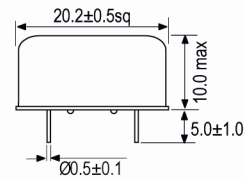
**Operating Temperature Ranges**

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

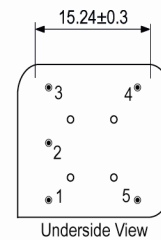
**Output Details**

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

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