

ISSUE 2; August 2019

### 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. Wide pulling ranges available.



### Frequency Parameters

- Frequency: 1.0MHz to 800.0MHz
- Frequency Stability:  $\pm 15.00\text{ppm}$  to  $\pm 100.00\text{ppm}$
- Nominal Frequency ( $f_0$ ) reference:  
Temperature =  $25^\circ\text{C} \pm 3^\circ\text{C}$   
Control Voltage = Mid point
- Ageing (typical):  $\pm 3\text{ppm}$  per year

### Electrical Parameters

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

Frequency	@Vs=3.3V	@Vs=5.0V
<15.0MHz	15mA	20mA
<80.0MHz	35mA	50mA
<190.0MHz	45mA	70mA
<500.0MHz	100mA	100mA

### Frequency Adjustment

- Pulling:  $\pm 50$  or  $\pm 100$  or  $\pm 150\text{ppm}$
- Control Voltage Range:  
For 3.3V supply =  $1.65\text{V} \pm 1.5\text{V}$   
For 5.0V supply =  $2.5\text{V} \pm 2.0\text{V}$
- Frequency Adjustment Range options:  
 $\pm 50\text{ppm}$  min  
 $\pm 100\text{ppm}$  min  
 $\pm 150\text{ppm}$  min  
For wider pulling range please contact our sales offices

### Operating Temperature Ranges

- 10 to  $60^\circ\text{C}$
- 20 to  $70^\circ\text{C}$
- 40 to  $85^\circ\text{C}$

### Output Details

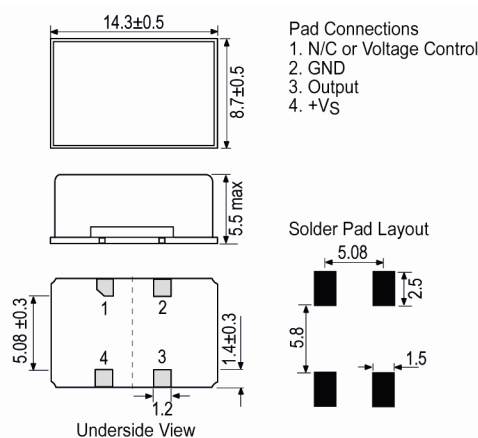
- Output Compatibility: HCMOS/Sinewave
- Drive Capability: 50ohms
- Sinewave Output Level (ref 50ohm):  
@3.3V 0dBm typ  
@5.0V 5dBm typ
- HCMOS Output Levels (ref 15pF):  
VoH < 90% Vs  
VoL < 10% Vs  
Duty Cycle 40/60%  
Rise and fall time: 10ns max

### Environmental Parameters

- Storage Temperature:  $-55$  to  $105^\circ\text{C}$
- Shock: MIL-STD-883C, Method 2002, Condition B
- Vibration: MIL-STD-883C, Method 2007, Condition A



### Outline (mm)



### 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)

**Ordering Information**

- Minimum data needed to open an enquiry:-
  - Frequency
  - Model
  - Supply Voltage
  - Frequency Stability (over operating temperature range)
  - Operating Temperature Range
  - Pullability

**Compliance**

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

**Packaging Details**

- Pack Style: Reel      Tape & reel in accordance with EIA-481-D  
     Pack Size: 600
- Pack Style: Bulk      Supplied tube or box packaging  
     Pack Size: 1

**Electrical Specification - maximum limiting values**

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	±15.0	-	-	-
		-20 to 70	±20.0	-	-	-
		-40 to 85	±30.0	-	-	-

*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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