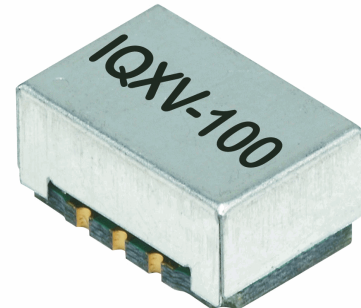


ISSUE 1; June 2019

### 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.  
Complementary output.  
Enable/Disable function.



### 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:  
24.0MHz <25mA  
800.0MHz <100mA

### Frequency Adjustment

- Pulling:  $\pm 50$  or  $\pm 100$  or  $\pm 150\text{ppm}$

### 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: LVPECL
- Drive Capability:  $50\Omega$  terminated to  $V_s - 2V$
- Output Levels:  
VoH  $V_s - 1.025V$  min  
VoL  $V_s - 1.62V$  max

### Output Control

- Enable/Disable Operation:  
Logic '0' or no connection to pad 2 enables the oscillator output  
Logic '1' to pad 2 disables the oscillator output  
Or No connection

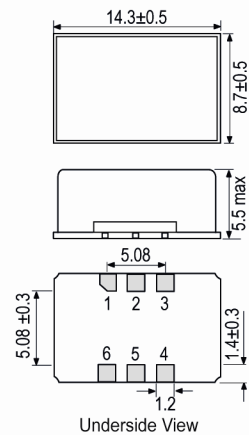
### Noise Parameters

- Phase Jitter (RMS): 12kHz to 20MHz: 1.0ps max

### Environmental Parameters

- Storage Temperature Range:  $-55$  to  $125^\circ\text{C}$
- Shock: MIL-STD-883C, Method 2002, Condition B
- Vibration: MIL-STD-883C, Method 2007, Condition A

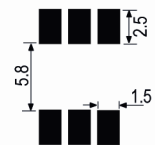
### Outline (mm)



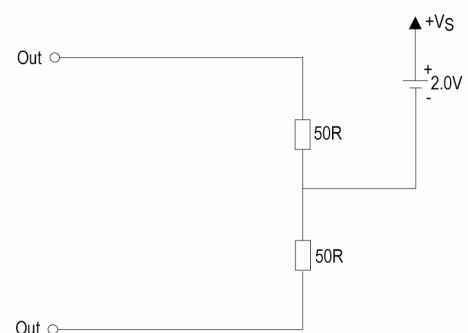
### Pad Connections

- N/C or Voltage Control
- N/C or Enable/Disable
- GND
- Output
- Complementary Output
- +Vs

### Solder Pad Layout



### Test Circuit



### 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)

**Ordering Information**

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

**Compliance**

- RoHS Status (2015/863/EU)      Compliant
- REACH Status                      Compliant
- MSL Rating (JDEC-STD-033):    1

**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 & Fall (20 to 80%)	Duty Cycle
		°C	ppm	mA	ns	%
1.0MHz	800.0MHz	-10 to 60	±15.0	-	1	45/55
		-20 to 70	±20.0	-	1	45/55
		-40 to 85	±30.0	-	1	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.](#)

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