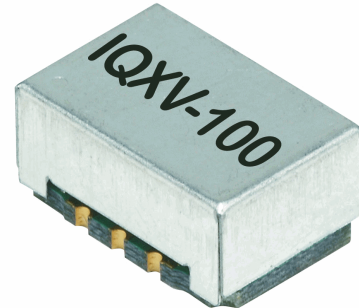


ISSUE 1; January 2016

**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

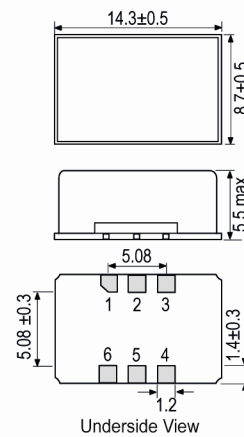
**Noise Parameters**

- 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

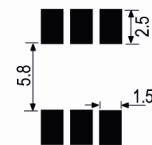
**Outline (mm)**



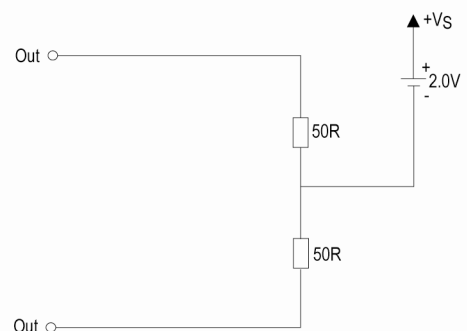
**Pad Connections**

1. N/C or Voltage Control
2. N/C or Enable/Disable
3. GND
4. Output
5. Complementary Output
6. +Vs

**Solder Pad Layout**



**Test Circuit**



**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  
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):    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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