

**ISSUE 1; August 2014 - RoHS 2011/65/EU**
**Description**

- Voltage controlled crystal oscillator in a ceramic package with a hermetically sealed metal lid

**Frequency Parameters**

- Frequency 1.0MHz to 60.0MHz
- Frequency Stability  $\pm 20.00\text{ppm}$  to  $\pm 50.00\text{ppm}$
- Ageing (@ 25°C):  $\pm 3\text{ppm}$  max

**Electrical Parameters**

- Supply Voltage 3.3V  $\pm 5\%$

**Frequency Adjustment**

- Pulling  $\pm 100\text{ppm}$  min
- Control Voltage 1.65V  $\pm 1.35\text{V}$
- Input Impedance 100k $\Omega$  min
- Linearity:  $\pm 10\%$  max

**Operating Temperature Ranges**

- 0 to 70°C
- -40 to 85°C

**Output Details**

- Output Compatibility HCMOS
- Drive Capability 15pF max
- Start Up Time: 10ms max

**Output Control**

- Standby Operation:  
Logic '1' (>70% Vs) to pad 2 enables oscillator output  
Logic '0' (<30% Vs) to pad 2 disables oscillator output: when disabled the oscillator output goes to the high impedance state  
No connection pad 2 enables oscillator output

**Output Levels**

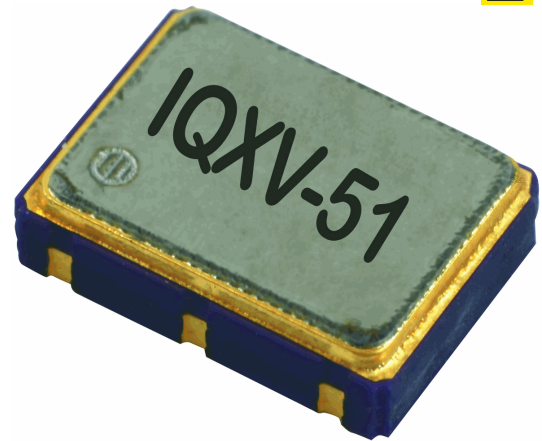
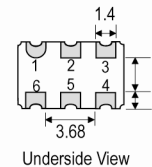
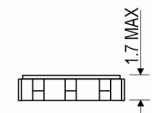
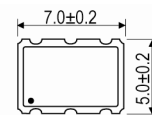
- VoH: >90% of Vs
- VoL: <10% of Vs

**Noise Parameters**

- Period Jitter (pk-pk): 100ps max
- Period Jitter (one sigma): 25ps max

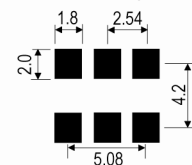
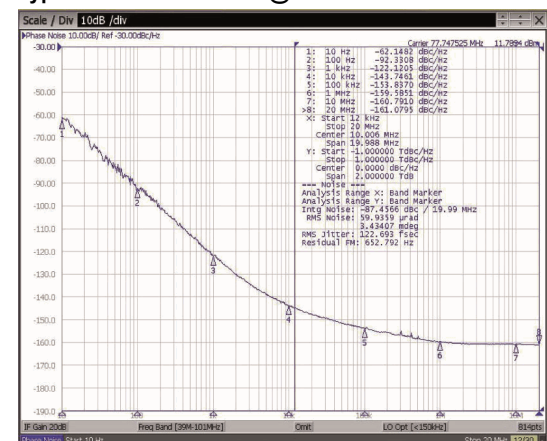
**Environmental Parameters**

- Storage Temperature Range: -55 to 125°C
- Drop: 1.2m drop (3 times) onto a hard surface
- Vibration: 1.5mm amplitude, 10-55-10Hz, full sine wave, 2mins in 3 mutually perpendicular planes, duration 2hrs in each plane


**Outline (mm)**


Underside View

- Pad Connections**
1. Voltage Control
  2. Standby Operation
  3. GND
  4. Output
  5. N/C
  6. +Vs

**Solder Pad Layout**

**Typical Phase Noise Plot @ 77.76MHz**

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