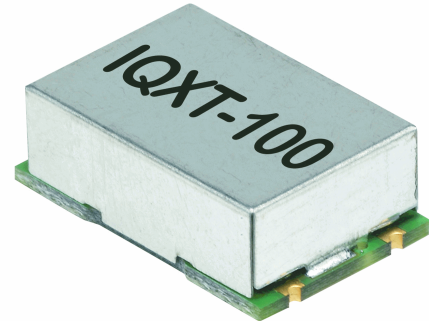


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Description

- 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. Non 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: $\pm 1\text{ppm}$ 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:
 - Vs $\pm 5\%$ = $\pm 0.1\text{ppm}$
- Typical Frequency vs Load Change:
 - Sinewave 50ohms $\pm 10\%$ = $\pm 0.2\text{ppm}$
 - HCMOS 15pF $\pm 10\%$ = $\pm 0.2\text{ppm}$

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 (Sinewave):

| | |
|-----------|--------------|
| Frequency | Current draw |
| @1.0MHz | 5mA |
| @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 = $2.5\text{V} \pm 2.0\text{V}$

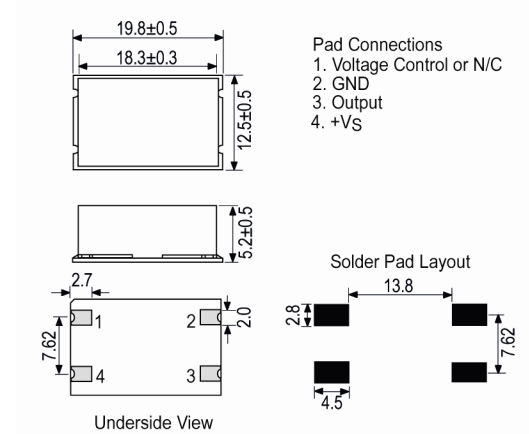
Operating Temperature Ranges

- -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 (+10dBm available on request)
- HCMOS Output Level:
 - VoH = $>90\%$ Vs
 - VoL = $< 10\%$ Vs
 - Duty Cycle = 40/60%
 - Rise and fall time = 10ns max

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
 Web: 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
- MIL-STD-883C, Method 2007, Condition A
- Shock: MIL-STD-883C, Method 2002, Condition B

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 in tube or box packaging
 Pack Size: 1
- Pack Style: Tape Tape & reel in accordance with EIA-481-D
 Pack Size: 250

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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