

ISSUE 1; March 2016

Description

- Simple package crystal oscillator in a hermetically sealed 8-pin DIL package



Frequency Parameters

- Frequency: 1.0MHz to 100.0MHz
- Frequency Stability: $\pm 25.00\text{ppm}$ to $\pm 100.00\text{ppm}$
- Ageing: $\pm 5\text{ppm}$ max in 1st yr @ 25°C

Electrical Parameters

- Supply Voltage: 5.0V $\pm 10\%$

Operating Temperature Ranges

- 10 to 70°C
- 40 to 85°C

Output Details

- Output Compatibility: HCMOS

| Drive Capability | |
|---------------------|------|
| 1.0MHz to 40.0MHz | 50pF |
| 40.0MHz to 80.0MHz | 30pF |
| 80.0MHz to 100.0MHz | 15pF |

Output Control

- Start Up Time: 10ms max

Output Levels

- VoL: 10% Vs max
- VoH: 90% Vs min

Noise Parameters

- Phase Jitter (12kHz-20MHz): 1ps rms max

Environmental Parameters

- Shock: 1500G, 0.5ms, 5 times in each of 6 directions, along 3 mutually perpendicular planes
- Vibration: 20G (20Hz-2000Hz), 1.5mm amplitude, cross-over frequency 80Hz, in 3 mutually perpendicular planes
- Storage Temperature Range: -55 to 125°C

Ordering Information

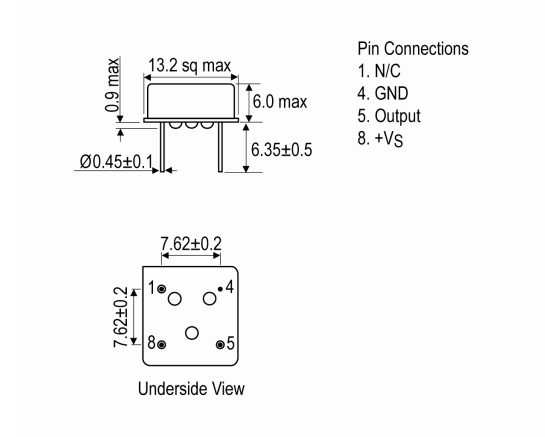
- Frequency*
Model*
Frequency Stability (over operating temperature range)*
Operating Temperature Range*
Supply Voltage
(*minimum required)
- Example
20.0MHz IQXO-825
HCMOS $\pm 50\text{ppm}$ -40 to 85C 5V

Compliance

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



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

Packaging Details

- Pack Style: Bulk Loose in Bulk Pack
Pack Size: 40

Electrical Specification - maximum limiting values 5.0V ±10%

| Frequency Min | Frequency Max | Temperature Range | Stability (Min) | Current Draw | Rise and Fall Time | Duty Cycle |
|---------------|---------------|------------------------|-----------------|--------------|--------------------|------------------|
| | | °C | ppm | mA | ns | % |
| 1.0MHz | 19.999999MHz | -10 to 70 -40 to 85 | ±25.0 ±25.0 | 20 20 | 6 6 | 45/55% 45/55% |
| 20.0MHz | 49.999999MHz | -10 to 70 -40 to 85 | ±25.0 ±25.0 | 40 40 | 5 5 | 45/55% 45/55% |
| 50.0MHz | 79.999999MHz | -10 to 70 -40 to 85 | ±25.0 ±25.0 | 50 50 | 4 4 | 45/55% 45/55% |
| 80.0MHz | 100.0MHz | -10 to 70 -40 to 85 | ±25.0 ±25.0 | 70 70 | 4 4 | 45/55% 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.](#)

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