

ISSUE 1; April 2016

### Description

- Ceramic package with a hermetically seam sealed metal lid suitable for automotive applications. Qualified to AEC-Q200 and with TS16949 release.



### Frequency Parameters

- Frequency 1.0MHz to 75.0MHz
- Frequency Stability  $\pm 25.00\text{ppm}$  to  $\pm 100.00\text{ppm}$
- Ageing  $\pm 5\text{ppm}$  max per year @ 25°C

### Electrical Parameters

- Supply Voltage 2.5V  $\pm 5\%$

### Operating Temperature Ranges

- -40 to 85°C
- -40 to 125°C

### Output Details

- Output Compatibility CMOS
- Drive Capability 15pF

### Output Control

- Enable/Disable Operation:  
Logic '1' (>70% Vs) to pad 1 enables oscillator output.  
Logic '0' (<30% Vs) to pad 1 disables oscillator output; the oscillator output goes to the high impedance state.  
No connection to pad 1 enables oscillator output.
- Standby Current:  
-40 to 85°C: 10µA max  
-40 to 125°C: 20µA max

### Environmental Parameters

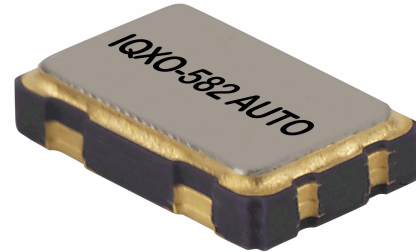
- Storage Temperature Range: -55 to 150°C
- Qualified to AEC-Q200

### Ordering Information

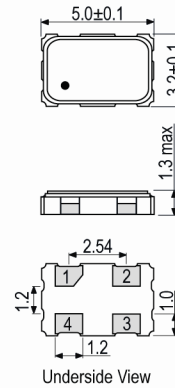
- Frequency\*
- Model\*
- Output
- Frequency Stability\*
- Operating Temperature Range\*
- Supply Voltage
- (\*minimum required)
- Example  
20.0MHz IQXO-582 AUTO  
CMOS  $\pm 100\text{ppm}$  -40 to 125C 2.5V

### Compliance

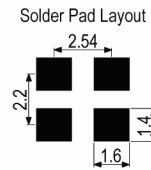
- RoHS Status (2011/65/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable



### Outline (mm)



Pad Connections  
 1. Enable/Disable  
 2. GND  
 3. Output  
 4. +Vs



### 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)

**Packaging Details**

- Pack Style: Reel      Tape & reel in accordance with EIA-481-D  
     Pack Size: 1,000
- Pack Style: Bulk      Loose in bulk pack  
     Pack Size: 100

**Electrical Specification - maximum limiting values 2.5V ±5%**

Frequency Min	Frequency Max	Temperature Range	Stability (Min)	Current Draw	Rise and Fall Time	Duty Cycle
		°C	ppm	mA	ns	%
1.0MHz	9.999999MHz	-40 to 85	±25.0	6	5	40/60%
		-40 to 125	±50.0	6	5	40/60%
10.0MHz	19.999999MHz	-40 to 85	±25.0	8	5	40/60%
		-40 to 125	±50.0	8	5	40/60%
20.0MHz	31.999999MHz	-40 to 85	±25.0	8	5	40/60%
		-40 to 125	±50.0	8	5	40/60%
32.0MHz	49.999999MHz	-40 to 85	±25.0	20	5	40/60%
		-40 to 125	±50.0	20	5	40/60%
50.0MHz	75.0MHz	-40 to 85	±25.0	20	4	40/60%
		-40 to 125	±50.0	20	4	40/60%

*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](mailto:info@iqdfrequencyproducts.com)  
 Web: [www.iqdfrequencyproducts.com](http://www.iqdfrequencyproducts.com)