

ISSUE 1; July 2024

### Description

- Ceramic package with a hermetically seam sealed metal lid suitable for automotive applications. Qualified to AEC-Q200 Rev D and with IATF-16949:2016 release. Not suitable for safety critical applications.



### Frequency Parameters

- Frequency 4.0MHz to 50.0MHz
- 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 3.3V  $\pm 10\%$

### 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 125°C
- Qualified to AEC-Q200 Rev D

### Manufacturing Details

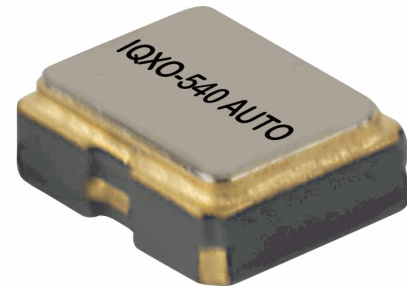
- RoHS Terminations NiAu
- RoHS Reflow NiAu

### Ordering Information

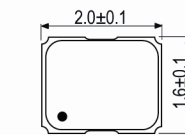
- Frequency\*  
Model\*  
Output  
Frequency Stability\*  
Operating Temperature Range\*  
Supply Voltage  
(\*minimum required)
- Example  
20.0MHz IQXO-540 AUTO  
CMOS  $\pm 100\text{ppm}$  -40 to 125C 3.3V

### Compliance

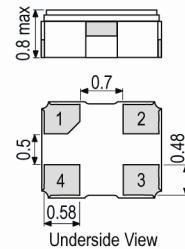
- RoHS Status (2015/863/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable



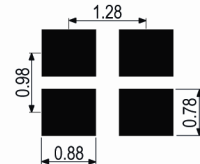
### Outline (mm)



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



### Solder Pad Layout



### Sales Office Contact Details:

UK: +44 (0)1460 270200

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

### Packaging Details

- Pack Style: Cutt      In tape, cut from a reel  
Standard Pack Quantity: 100
- Pack Style: RL3K      Tape & reel in accordance with EIA-481  
Standard Pack Quantity: 3,000

### Electrical Specification - maximum limiting values 3.3V $\pm$ 10%

Frequency Min	Frequency Max	Temperature Range	Stability (Min)	Current Draw	Rise and Fall Time	Duty Cycle
		°C	ppm	mA	ns	%
4.0MHz	9.999999MHz	-40 to 85	$\pm$ 25.0	5	5	40/60%
		-40 to 125	$\pm$ 50.0	5	5	40/60%
10.0MHz	19.999999MHz	-40 to 85	$\pm$ 25.0	6	5	40/60%
		-40 to 125	$\pm$ 50.0	6	5	40/60%
20.0MHz	31.999999MHz	-40 to 85	$\pm$ 25.0	7	5	40/60%
		-40 to 125	$\pm$ 50.0	7	5	40/60%
32.0MHz	50.0MHz	-40 to 85	$\pm$ 25.0	8	5	40/60%
		-40 to 125	$\pm$ 50.0	8	5	40/60%

*This document was correct at the time of printing; please contact your local sales office for the latest version.*

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### Sales Office Contact Details:

UK: +44 (0)1460 270200

Email: [info@iqdfrequencyproducts.com](mailto:info@iqdfrequencyproducts.com)

Web: [www.iqdfrequencyproducts.com](http://www.iqdfrequencyproducts.com)