

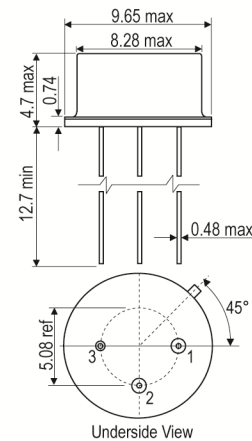
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### Description

- The SQXO-2AT crystal oscillator consists of a TTL and CMOS-compatible hybrid circuit and a miniature quartz crystal packaged in a hermetically sealed 3-pin TO-39 package
- FEATURES:
  - CMOS and TTL compatible
  - Low EMI emission
  - Wide temperature range
  - Hermetically sealed
  - Full military testing available
- APPLICATIONS:
  - Industrial, Computer & Communications -
  - General purpose clock oscillator
  - Military & Aerospace -
  - Airborne hybrid computer
  - Flight recorder
- Please note that all data is only valid at 25°C unless otherwise stated.



Outline (mm)



Pin Connections

1. +V<sub>S</sub>
2. Output
3. GND

### Frequency Parameters

- Frequency: 500.0kHz to 120.0MHz
- Frequency Tolerance: ±100.00ppm to ±1,000.00ppm
- Tolerance Condition: @ 25°C
- Frequency Stability: ±5.00ppm to ±100.00ppm
- Ageing: ±10ppm max in 1st year @ 25°C
- Frequency Stability does not include Frequency Tolerance @ 25°C
- Note: Other Frequency Tolerances and Stabilities are available - please contact an IQD Sales Office

### Electrical Parameters

- Supply Voltage: 5.0V ±10%
- Supply Current:
  - 10mA @ 50MHz
  - 8mA @ 40MHz
  - 6mA @ 30MHz
  - 4mA @ 24MHz
- Absolute Maximum Supply Voltage: -0.3V to 7.0V

### Operating Temperature Ranges

- 0 to 50°C
- -10 to 70°C
- -40 to 85°C
- -55 to 125°C

### Output Details

- Output Compatibility: CMOS
- Drive Capability: 15pF

### Output Control

- Start-Up Time: 5ms max

### Environmental Parameters

- Shock: 1000G peak, 0.3ms, 1/2 sine
- Vibration: 10G rms, 10-2000Hz, random
- Storage Temperature Range: -55 to 125°C

### 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)

**Manufacturing Details**

- Maximum Process Temperature: 260°C for 10sec

**Ordering Information**

- Frequency\*
- Model\*
- Output
- Frequency Tolerance\*
- Frequency Stability\*
- Operating Temperature Range\*
- Supply Voltage
- (\*minimum required)
- Example
- 10.0MHz SQXO-2AT
- CMOS ±100ppm ±100ppm -10 to 70C 5V

**Compliance**

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

**Packaging Details**

- Pack Style: Bulk      Loose in bulk pack
- Pack Size: 1
- Pack Style: Tray      Supplied on a tray
- Pack Size: 1

**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	%
500.0kHz	120.0MHz	0 to 50	±5.0	-	6	40/60%
		-10 to 70	±10.0	-	6	40/60%
		-40 to 85	±20.0	-	6	40/60%
		-55 to 125	±30.0	-	6	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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