



ISSUE 1; September 2014 - RoHS 2011/65/EU

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



Frequency Parameters

- Frequency 500.0kHz to 120.0MHz
- Frequency Tolerance $\pm 100.00\text{ppm}$ to $\pm 1,000.00\text{ppm}$ @ 25°C
- Tolerance Condition @ 25°C
- Frequency Stability $\pm 5.00\text{ppm}$ to $\pm 100.00\text{ppm}$
- Ageing $\pm 10\text{ppm}$ 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 $\pm 10\%$
- 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

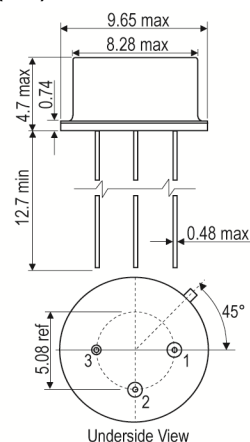
Environmental Parameters

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

Manufacturing Details

- Maximum Process Temperature: 260°C for 10sec

Outline (mm)



Pin Connections
1. +Vs
2. Output
3. GND

Sales Office Contact Details:

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**Ordering Information**

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

Compliance

- RoHS Status Optional
- REACH Status Compliant
- MSL Rating (JDEC-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 $\pm 10\%$

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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