



# Crystal Clock Oscillator Specification **SQXO-2AT**

## ISSUE 1; March 2016

## 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.

## **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 Compatability CMOSDrive Capability 15pF

# **Output Control**

Start-Up Time: 5ms max

# **Environmental Parameters**

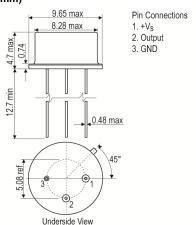
Shock: 1000G peak, 0.3ms, 1/2 sine
 Vibration: 10G rms, 10-2000Hz, random
 Storage Temperature Range: -55 to 125°C

# Sales Office Contact Details:

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## Outline (mm)



Email: info@iqdfrequencyproducts.com





# Crystal Clock Oscillator Specification **SQXO-2AT**

## **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 (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 ±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%

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