Crystal Clock Oscillator Specification
SQXO-2AT

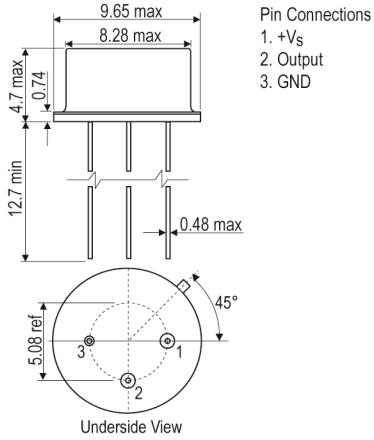
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Description

- 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)



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 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

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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%

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