

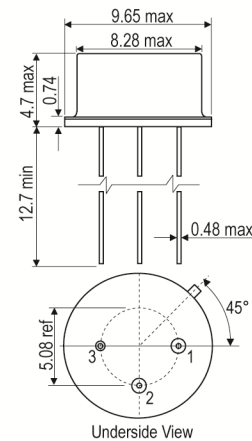
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Description

- 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_S
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:

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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% |

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