



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

Description

- Tight stability, hermetically sealed oscillator in a 3.2 x 2.5mm SMD package



Frequency Parameters

- Frequency 4.0MHz to 54.0MHz
- Frequency Stability $\pm 10.00\text{ppm}$ to $\pm 15.00\text{ppm}$
- Frequency Stability is inclusive of tolerance @ 25°C, operating temperature range, supply voltage variation, load variation and ageing in 1st year @ 25°C

Electrical Parameters

- Supply Voltage 3.3V $\pm 10\%$

Operating Temperature Ranges

- -20 to 70°C
- -40 to 85°C

Output Details

- Output Compatibility CMOS
- Drive Capability 15pF

Output Control

- Logic '1' (>70%Vs) to pad 1 enables oscillator output
Logic '0' (<30%Vs) to pad 1 disables oscillator output; when disabled the oscillator output goes to the high impedance state
No connection to pad 1 enables oscillator output
- Standby Current: 10µA max

Output Levels

- VoH: 90%Vs min
- VoL: 10%Vs max

Noise Parameters

- Period Jitter (RMS 1σ): 3ps typ

Environmental Parameters

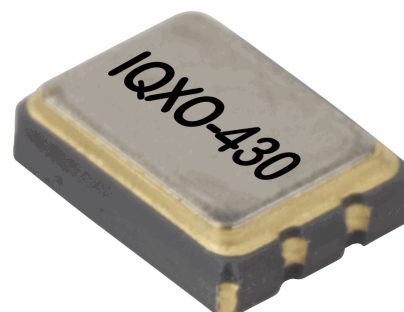
- Drop: 100cm drop (3 times) onto hard wooden board
- Vibration: Frequency 10Hz-55Hz, amplitude 1.5mm (10Hz-36Hz), 4G (36Hz-55Hz), sweep time 1min/oct, duration 2hrs in 3 mutually perpendicular planes
- Storage Temperature Range: -40 to 85°C

Manufacturing Details

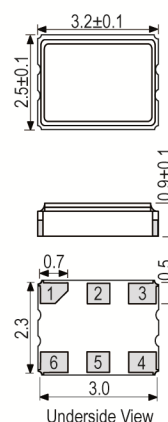
- Maximum Process Temperature: 260°C for 10sec

Ordering Information

- Frequency*
Model*
Output Compatibility
Frequency Stability (over operating temperature range)*
Operating Temperature Range*
Supply Voltage
(*minimum required)
- Example
10.0MHz IQXO-430
CMOS $\pm 15\text{ppm}$ -40 to 85C 3.3V



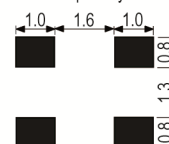
Outline (mm)



Pad Connections

1. E/D
2. N/C
3. GND
4. Output
5. N/C
6. +Vs

Solder pad layout



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**Compliance**

- RoHS Status Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

Packaging Details

- Pack Style: Reel Tape & reel in accordance with EIA-481-D
Pack Size: 1,000
- Pack Style: Bulk Loose in bulk pack
Pack Size: 100

Electrical Specification - maximum limiting values 3.3V $\pm$ 10%

Frequency Min	Frequency Max	Temperature Range	Stability (min)	Current Draw	Rise and Fall Time	Duty Cycle
		°C	ppm	mA	ns	%
4.0MHz	54.0MHz	-20 to 70	$\pm$ 10.0	7	5	45/55
		-40 to 85	$\pm$ 10.0	7	5	45/55

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