

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

- Tight stability, hermetically sealed oscillator in a 2.5 x 2.0mm SMD package


Frequency Parameters

- Frequency 4.0MHz to 54.0MHz
- Frequency Stability $\pm 10.00\text{ppm}$ to $\pm 20.00\text{ppm}$
- 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' ($\geq 70\%V_s$) to pad 1 enables oscillator output
Logic '0' ($\leq 30\%V_s$) 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

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

Noise Parameters

- Period Jitter (RMS 1σ): 3ps typ

Environmental Parameters

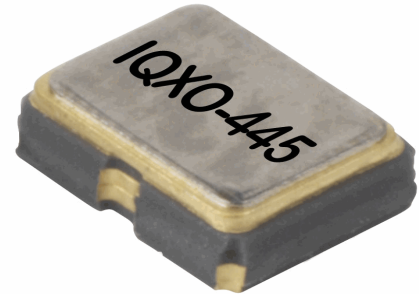
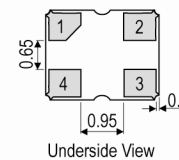
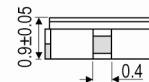
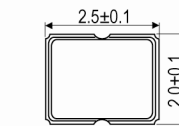
- Drop: 100cm drop (3 times) onto hard wooden board
- Vibration: Frequency 10Hz-55Hz, amplitude 1.5mm (10Hz-36Hz), 4G (36Hz-55Hz), sweep time 1min/oct, duration 2hrs in 3 mutually perpendicular planes
- Storage Temperature Range: -40 to 85°C

Manufacturing Details

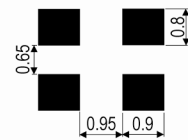
- Maximum Process Temperature: 260°C for 10sec

Ordering Information

- Frequency*
Model*
Output Compatibility
Frequency Stability (over operating temperature range)*
Operating Temperature Range*
Supply Voltage
(*minimum required)
- Example
8.0MHz IQXO-445
CMOS $\pm 15\text{ppm}$ -40 to 85C 3.3V


Outline (mm)


Pad Connections:
 1. Enable/Disable
 2. GND
 3. Output
 4. +Vs

Solder Pad Layout

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