



ISSUE 10; August 2014 - RoHS 2011/65/EU

**Description**

- A 5V supply, 8-pin DIL crystal oscillator with standby function in a hermetically sealed metal package designed to meet tough environmental specifications  
See our IQXO-35 for product with no standby function  
For standard parts in this package please see our IQXO-826  
For parts that meet tough environmental specifications and military temperature range please see our IQXO-87  
For individually screened parts that meet tough environmental specifications and military temperature range please see our IQXO-88



**Frequency Parameters**

- Frequency 500.0kHz to 70.0MHz
- Frequency Tolerance ±5.00ppm to ±25.00ppm
- Frequency Stability ±25.00ppm to ±100.00ppm
- Ageing ±5ppm max per year

**Electrical Parameters**

- Supply Voltage 5.0V ±0.25V
- Standby Current: 50µA typ

**Operating Temperature Ranges**

- -40 to 85°C

**Output Details**

- Output Compatibility HCMOS/TTL
- Drive Capability 50pF max or 10TTL

**Output Control**

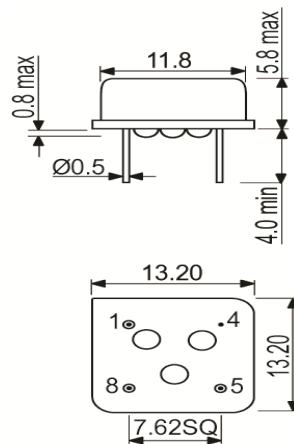
- Standby Operation:  
No connection or Logic '1' to pin 1 enables oscillator output  
Logic '0' to pin 1 disables oscillator output; when disabled the oscillator output goes to the high impedance state  
Maximum 'pull-down' resistance required to disable output = 20kΩ

**Environmental Parameters**

- Acceleration: 490m/s<sup>2</sup> for 1min in the 'Y1' plane
- Bump: 4000 bumps at 391m/s<sup>2</sup> in each of 3 mutually perpendicular planes
- Shock: 981m/s<sup>2</sup>, 6ms, 3 times in each of 3 mutually perpendicular planes
- Vibration: 10Hz-60Hz, 0.75mm amplitude, 60Hz-2000Hz, 98.1m/s<sup>2</sup>, 30mins in each of 3 mutually perpendicular planes
- Humidity:  
Steady State: In accordance with Test Ca of IEC 60068-2-3, for 56 days at 40°C at a relative humidity of 93%  
Cyclic: In accordance with Test Db (variant 1) of IEC 60068-2-30, at severity b, 55°C for 6 cycles
- Solderability: In accordance with Test Ta of IEC 60068
- Rapid Change of Temperature over Operating Temperature Range:  
10 cycles
- Hermetic Seal: Not to exceed 1 x 10<sup>-8</sup> mBar litres of Helium leakage
- Storage Temperature Range: -55 to 125°C

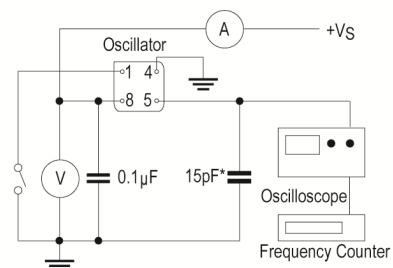


**Outline (mm)**



- Pin Connection
1. Standby Operation
  4. GND
  5. Output
  8. +Vs

**Test Circuit**



\*Inclusive of jiggging and equipment capacitance

Note: Pin 1 = No connection on non standby option models

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