



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



**Description**

- Simple package crystal oscillator in a hermetically sealed 14-pin DIL package with tri-state function

**Frequency Parameters**

- Frequency 1.0MHz to 166.0MHz
- Frequency Stability  $\pm 25.00\text{ppm}$  to  $\pm 100.00\text{ppm}$
- Ageing  $\pm 5\text{ppm}$  max in 1st yr @ 25°C

**Electrical Parameters**

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

**Operating Temperature Ranges**

- 10 to 70°C
- 40 to 85°C

**Output Details**

- Output Compatibility HCMOS

Drive Capability	
1.0MHz to 40.0MHz	50pF
40.0MHz to 80.0MHz	30pF
80.0MHz to 166.0MHz	15pF

**Output Control**

- Tri-state Operation:  
Logic '1' to pin 1 enables oscillator output  
Logic '0' to pin 1 disables oscillator output, the oscillator output goes to a high impedance state  
No connection to pin 1 enables oscillator output
- Start Up Time: 10ms max

**Output Levels**

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

**Noise Parameters**

- Phase Jitter (12kHz-20MHz): 1ps rms max

**Environmental Parameters**

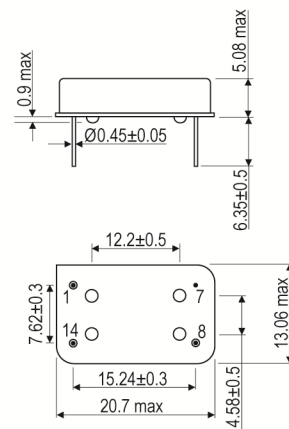
- Shock: 1500G, 0.5ms, 5 times in each of 6 directions, along 3 mutually perpendicular planes
- Vibration: 20G (20Hz-2000Hz), 1.5mm amplitude, cross-over frequency 80Hz, in 3 mutually perpendicular planes
- Storage Temperature Range: -55 to 125°C

**Ordering Information**

- Frequency\*
- Model\*
- Frequency Stability (over operating temperature range)\*
- Operating Temperature Range\*
- Supply Voltage  
(\*minimum required)
- Example  
20.0MHz IQXO-823  
HCMOS  $\pm 50\text{ppm}$  -40 to 85C 3.3V



**Outline (mm)**



- Pin Connections
- 1. Tri-State
  - 7. GND
  - 8. Output
  - 14. +Vs

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