

ISSUE 1; July 2016

Description

- 1.6 x 1.2mm crystal oscillator in a ceramic package with a seam sealed metal lid, hermetically sealed.



Frequency Parameters

- Frequency: 32.768kHz
- Frequency Stability: $\pm 30.00\text{ppm}$ to $\pm 100.00\text{ppm}$
- Frequency Stability: Includes Frequency Tolerance @ 25°C, operating temperature range, supply voltage variation and load variation.

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 max
- Output Voltage Levels:
 - Output Low (VoL): 10%Vs max
 - Output High (VoH): 90%Vs min
- Start Up Time: 7ms max

Output Control

- Stand-by Mode:
 - Logic '0' (30%Vs max) to pad 1 disables the oscillator output, the output goes to a high impedance state.
 - Logic '1' (70%Vs min) or no connection to pad 1 enables oscillator output.
- Stand-by Current: 3µA max

Environmental Parameters

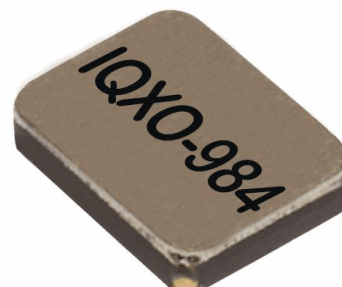
- Storage Temperature Range: -40 to 85°C

Ordering Information

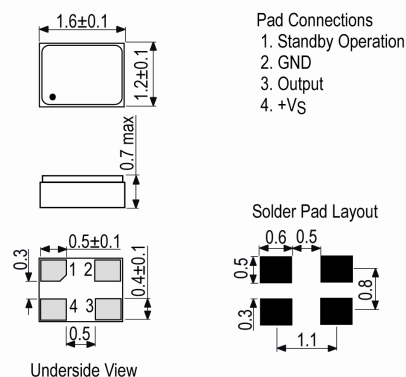
- Frequency
- Model*
- Output
- Frequency Stability*
- Operating Temperature Range*
- Supply Voltage
- (*minimum required)
- Example
 - 32.768kHz IQXO-984
 - CMOS $\pm 50\text{ppm}$ -20 to 70C 3.3V

Compliance

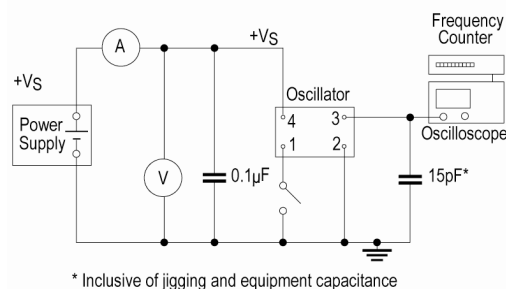
- RoHS Status (2011/65/EU): Compliant
- REACH Status: Compliant
- MSL Rating (JDEC-STD-033): Not Applicable



Outline (mm)



Test Circuit



Sales Office Contact Details:

UK: +44 (0)1460 270200
Germany: 0800 1808 443

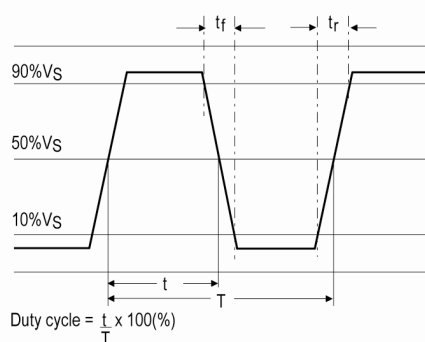
France: 0800 901 383
USA: +1.760.318.2824

Email: info@iqdfrequencyproducts.com
Web: www.iqdfrequencyproducts.com

Packaging Details

- Pack Style: Bulk Loose in bulk pack
Pack Size: 1
- Pack Style: Reel Tape & reel in accordance with EIA-481-D
Pack Size: 3,000
- Pack Style: Cutt In tape, cut from a reel
Pack Size: 1

Wave Form



Electrical Specification - maximum limiting values 3.30V ±10%

Frequency	Temperature Range	Stability (Min)	Current (NoLoad)	Rise and Fall Time	Duty Cycle
	°C	ppm	mA	ns	%
32.768000kHz	-40 to 85	±50.00	0.03	200	45/55
	-20 to 70	±30.00	0.03	200	45/55

This document was correct at the time of printing; please contact your local sales office for the latest version.

[Click to view latest version on our website.](#)

Sales Office Contact Details:

UK: +44 (0)1460 270200
Germany: 0800 1808 443

France: 0800 901 383
USA: +1.760.318.2824

Email: info@iqdfrequencyproducts.com
Web: www.iqdfrequencyproducts.com