



ISSUE 0.13; January 2014 - RoHS 2011/65/EU

Description

- Oven controlled crystal oscillator on a FR4 base with a metal lid. Not hermetically sealed.

Please note: This document is intended to illustrate the general capability and versatility of IQD's design. For specific enquiries please contact one of IQD's Sales Offices where we can tailor a unique specification to meet your needs.

Frequency Range

- Frequency 10.00 to 100.00MHz

Supply Voltage

- Voltage 3.3V ±5%

Output Compatibility & Load

- Output Compatibility HCMOS or Sinewave

Frequency Stabilities

- Frequency Stability ±5.00ppb

Operating Temperature Ranges

- -20 to 70°C
- -30 to 75°C
- -40 to 85°C

Frequency Parameters

- Frequency Tolerance (within 30 days after ex-works; T=25°C, Vs = 3.3V, 15mins warm up): ±0.5ppm
- Load Coefficient (@ ±5% change): ±5ppb max
- Maximum Ageing (after 30 days operation):
 - ±5ppb per day
 - ±500ppb per year
- Short Term Stability (Allan Variance): 0.1ppb max
- Supply Voltage Coefficient (@ ±5% change): ±5ppb max

Electrical Parameters

- Current Draw:
 - Warm up: 600mA max
 - Steady state (@25°C): 300mA max
- Warm Up Time: (@25°C, F<±100ppb of final frequency): 5mins max

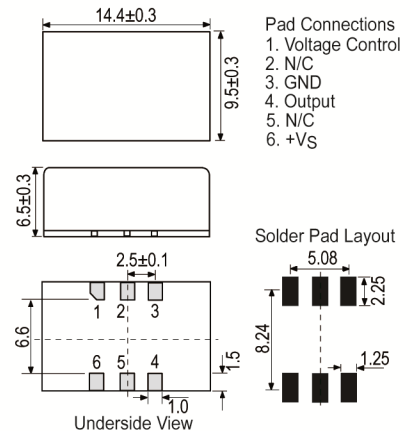
Output Details

- HCMOS Output Details:
 - Load: 15pF
 - Rise and Fall Time (@ 10MHz): 6ns max
- Sinewave Output Details:
 - Load: 50Ω

Noise Parameter

- Phase Noise @10MHz (typical):
 - 95dBc/Hz @ 10Hz
 - 130dBc/Hz @ 100Hz
 - 150dBc/Hz @ 1kHz
 - 150dBc/Hz @ 10kHz
 - 155dBc/Hz @ 100kHz
 - 155dBc/Hz @ 1MHz

Outline (mm)



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Environmental Parameters

- Operable Temperature Range: -40 to 85°C
- Shock: IEC 60068-2-27, Test Ea, Severity 50A: 50G, 11ms duration, 1/2 sine wave, 3 times in each of 3 mutually perpendicular planes
- Storage Temperature Range: -55 to 105°C
- Vibration: IEC 60068-2-06, Test Fc: 10Hz-500Hz, 0.75mm displacement, 10G acceleration, one cycle per 30mins, 3 times in each of 3 mutually perpendicular planes, test 2hrs

Manufacturing Details

- Moisture Sensitivity Level: 2

Packing Details

- Pack Style: **Bulk** Loose in bulk pack
Pack Size 1
- Pack Style: **Reel** In tape on a reel in accordance with EIA-481-
Pack Size 500
- Alternative packing options available

Electrical Specification - maximum limiting values 3.3V ±5%

Frequency Range	Operating Temp Range	Frequency Stability	Output Waveform	Duty Cycle %
10.00 to 100.00MHz	-20 to 70°C	±5.00ppb	HCMOS or Sinewave	na
	-30 to 75°C	±5.00ppb	HCMOS or Sinewave	na
	-40 to 85°C	±5.00ppb	HCMOS or Sinewave	na

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

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