

## ISSUE 1; September 2016

#### Description

- 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.
  - Hermetically sealed Oven Controlled Crystal Oscillator (OCXO)
    - in industry standard case style
  - Ultra low phase noise
  - Tight temperature stability
  - Voltage controlled frequency adjustment optional

#### **Frequency Parameters**

Frequency	80.0MHz to 130.0MHz
Frequency Stability	±50.00ppb

#### Electrical Parameters

- Supply Voltage
- Power Consumption: During warm up: 350mA max (warm up time 5mins max) At 25°C, after warm up: 150mA max

12.0V ±5%

Sinewave

50Ω

#### **Operating Temperature Ranges**

-20 to 70°C

#### **Output Details**

- Output Compatability
- Drive Capability
  - Output Power: +13dBm into 50Ω

## **Output Control**

 Pulling Example (optional): Pulling Range: ±2ppm min Control Voltage: 2.5V ±2.5V

## **Noise Parameters**

- Phase Noise (typical figures @ 100.0MHz, 12.0V supply and sinewave):
  - -95dBc/Hz @ 10Hz
  - -130dBc/Hz @ 100Hz
  - -160dBc/Hz @ 1kHz
  - -175dBc/Hz @ 10kHz
  - -180dBc/Hz @ 100kHz
  - -182dBc/Hz @ 1MHz
- Note: We are at an advanced stage of further development on the close-in phase noise and expect to be able to offer improved performance in this area in the near future.

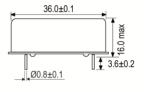
#### **Environmental Parameters**

- Shock: IEC 60068-2-27, Test Ea (CECC 69000, clause 4.6.8): 100G, 6ms duration, 3 times in each of 3 mutually perpendicular planes
- Vibration (Sinusoidal): IEC 60068-2-6, Test Fc (CECC 69000, clause 4.6.7): 10Hz-55Hz 0.75mm displacement, 55Hz-200Hz 10G acceleration, 30mins in each of 3 mutually perpendicular planes

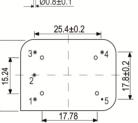


# Outline (mm)

27.0±0.1

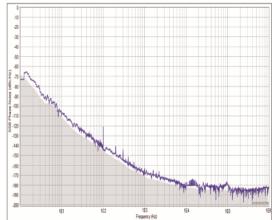


- Pin Connection 1. Voltage Control 2. N/C 3. +VS
- 4. Output 5. GND



Underside View

# Phase Noise @ 100.0MHz



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# Compliance

- RoHS Status (2011/65/EU)
- REACh Status

Compliant Compliant

- MSL Rating (JDEC-STD-033):
  - b): Not Applicable

# Packaging Details

Pack Style: Bulk Loose in bulk pack
Pack Size: 1

# Electrical Specification - maximum limiting values 12.0V ±5%

Frequency Min	Frequency Max	Temperature Range	Stability (Min)	Current Draw	Rise and Fall Time	Duty Cycle
		°C	ppb	mA	ns	%
80.0MHz	130.0MHz	-20 to 70	±50.0	-	-	-

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