

# **Oscillator Specification**

Part No. + Packaging: LFMCXO064083BULK

#### Description

 Microcomputer Compensated Crystal Oscillator with voltage control (MCXO)

■ Model IQMT-100-4-B

■ Model Issue number 1

### **Frequency Parameters**

Frequency 19.20MHz
 Frequency Tolerance @ 25°C ±0.50ppm
 Frequency Stability ±0.05ppm
 Operating Temperature Range -40.00 to 85.00°C

■ Ageing ±0.02ppm max per day, ±0.5ppm

max per year

 Supply Voltage Variation (measurement referenced to frequency observed with TA=25°C, Vs varied from 3.13V to 3.47V, VC =1.65V and load=10kΩ//10pF): ±0.1ppm max

 Load Variation (5% load change measurement referenced to frequency observed with TA=25°C, Vs=3.3V, VC=1.65V and load=10kΩ//10pF): ±0.1ppm max

 Frequency Tolerance (measurement referenced to frequency observed with TA=25°C, Vs=3.3V, VC=1.65V and within 30 days after ex-works)

 Short Term Stability (@ 25°C after 10mins power on): 2E-10/s typ @ 10MHz

Frequency Stability: TA varied from -40°C to 85°C, measurement referenced to frequency observed with TA=25°C, Vs=3.3V, VC=1.65V, load=10kΩ//10pF and temperature variable speed less than 2°C per minute.

■ Ageing: TA=25°C, Vs=3.3V, VC=1.65V and after 1hr of operation.

# **Electrical Parameters**

■ Supply Voltage 3.3V ■ Supply Voltage Tolerance ±5%

■ Current Draw 10.00mA max

■ Current: TA=25°C, Vs=3.3V, VC=1.65V and load=10kΩ//10pF

# **Frequency Adjustment**

Pulling ±10ppm to ±15ppm
 Control Voltage Details 1.65V ±1.65V

■ Linearity: ±10% max

Input Impedance: 100kΩ min

Slope: Positive

### **Output Details**

■ Output Compatability Clipped Sine■ Output Load 10kΩ//10pF

Output Level: 0.8V pk-pk min

#### **Noise Parameters**

■ Phase Noise (@ 10MHz typ):

-90dBc/Hz @ 10Hz

-115dBc/Hz @ 100Hz

-135dBc/Hz @ 1kHz

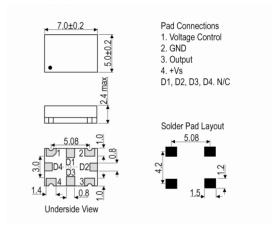
-145dBc/Hz @ 10kHz

-148dBc/Hz @ 100kHz

-150dBc/Hz @ 1MHz



## Outline (mm)



# **Sales Office Contact Details:**

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# **Environmental Parameters**

- Shock: IEC 60068-2-27, Test Ea: 100G acceleration for 6ms, half sinewave, in 3 mutually perpendicular planes
- Vibration: IEC 60068-2-6, Test Fc: 10Hz-2000Hz, 0.75mm amplitude, 10G acceleration, 30mins per cycle, in 3 mutually perpendicular planes, test duration 2hrs
- Storage Temperature Range: -55 to 105°C
  Operable Temperature Range: -40 to 85°C
- ESD Level:

HBM, Class 2: 2000V to 4000V, JEDEC JS-001-2010 Machine Model, Class B: 200V to 400V, JEDEC JS-001-2010

#### **Manufacturing Details**

- Moisture Sensitivity Level: 2
- Maximum Reflow Temperature: 260°C (30secs max)

# Compliance

RoHS Status CompliantREACh Status Compliant

# **Packaging**

■ Pack Type: Bulk Loose in bulk pack

Pack Size

Alternative packing option available

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

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