

Oscillator Specification

Part No. + Packaging: LFMCXO063771BULK

Description

 Microcomputer Compensated Crystal Oscillator with voltage control (MCXO)

■ Model IQMT-100-4-B

■ Model Issue number

Frequency Parameters

Frequency 12.80MHz
 Frequency Tolerance @ 25°C ±0.50ppm
 Frequency Stability ±0.14ppm
 Operating Temperature Range -40.00 to 85.00°C

■ Ageing ±0.02ppm max per day, ±1ppm

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): ±0.5ppm

 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 SineOutput Load 10kΩ//10pF

■ Output Level: 0.8V pk-pk min

Phase Noise (@ 10MHz typ):

-90dBc/Hz @ 10Hz

-115dBc/Hz @ 100Hz

-135dBc/Hz @ 1kHz

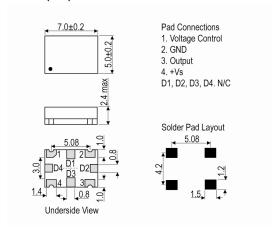
-145dBc/Hz @ 10kHz

-148dBc/Hz @ 100kHz

-150dBc/Hz @ 1MHz



Outline (mm)



Sales Office Contact Details:

UK: +44 (0)1460 270200 France: +33 (0)5 34 50 91 18 Germany: +49 (0) 30 408 192 300 USA: +1 408.273.4530 Email: info@iqdfrequencyproducts.com
Web: www.iqdfrequencyproducts.com

Printed on 11 Aug 14 11:22 Page 1 of 2



Oscillator Specification

Part No. + Packaging: LFMCXO063771BULK

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.

Sales Office Contact Details:

UK: +44 (0)1460 270200 Germany: +49 (0) 30 408 192 300 France: +33 (0)5 34 50 91 18 Email: info@iqdfrequencyproducts.com USA: +1 408.273.4530 Web: www.iqdfrequencyproducts.com

Printed on 11 Aug 14 11:22 Page 2 of 2