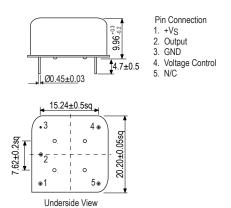
OSCILLATOR SPECIFICATION

Part Number + Packaging: LFOCXO053596Bulk

Model: IQOV-50-10





Outline drawing; All Dimensions in mm

Holder 20.2 x 20.2mm				
### #################################	Frequency	20.0MHz		
### #################################	Holder	20.2 x 20.2mm		
Operating Temperature Range —20 to 70°C Operable Temperature Range —30 to 80°C Ageing (after 30 days continuous operation) ±2ppb max per day ±500ppb max after 1st year ±3000ppb max after 10 years Supply Voltage Variation (@ ±5% change) ±50ppb max ±50ppb max ±50ppb max Supply Voltage 3.3V ±5% Current Consumption 300mA max @ 25°C steady-state 800mA max during warm-up Pulling ±500ppb min Control Voltage 1.65V ±1.65V Input Impedance 100kΩ min ±10% max Modulation Bandwidth (3dB) 10kHz min Output Compatibility HCMOS Output Load 01kΩ//15pF Output Levels Output Levels Output Levels Output High 2.8V min Rise / Fall Time 4ns max (10% to 90%) Phase Noise (typical) -125dBc/Hz @ 10kHz -125dBc/Hz @ 10kHz -125dBc/Hz @ 10kHz -135dBc/Hz @ 10kHz -145dBc/Hz @ 10kHz	Frequency Tolerance @ 25°C	±500ppb max		
Operable Temperature Range	Frequency Stability vs Operating Temperature Range	±100ppb max		
Ageing (after 30 days continuous operation) #2ppb max per day #500ppb max after 1st year #3000ppb max after 10 years #500ppb max #500ppb max #500ppb max #500ppb max #500ppb max #500ppb max #500ppb max #500ppb max #500ppb max #500ppb max #500ppb max #500ppb max #500ppb max #500ppb max #500ppb min #500ppb max #50ppb min #50pb max #50ppb min #50pb max #50ppb min #50pb max #50pb max #50ppb min #50pb max #50pb max #50pb max #50pb max #50pb max #5	Operating Temperature Range	-20 to 70°C		
#500ppb max after 1st year #3000ppb max after 10 years #50ppb max #50ppb max #50ppb m	Operable Temperature Range	-30 to 80°C		
Load Variation (@ ±5% change) ±50ppb max Supply Voltage 3.3V ±5% Current Consumption 300mA max @ 25°C steady-state 800mA max during warm-up Pulling ±5000ppb min Control Voltage 1.65V ±1.65V Input Impedance 100kΩ min Linearity ±10% max Modulation Bandwidth (3dB) 10kHz min Output Compatibility HCMOS Output Load 10kΩ//15pF Output Levels Output Low: 0.3V max Output High 2.8V min Rise / Fall Time 4ns max (10% to 90%) Phase Noise (typical) -100dBc/Hz @ 10Hz -125dBc/Hz @ 10Hz -135dBc/Hz @ 10Hz -135dBc/Hz @ 10kHz -145dBc/Hz @ 10kHz -14	Ageing (after 30 days continuous operation)	±500ppb max after 1st year		
Supply Voltage 3.3V ±5%	Supply Voltage Variation (@ ±5% change)	±50ppb max		
Current Consumption 300mA max @ 25°C steady-state 800mA max during warm-up Pulling ±5000ppb min Control Voltage 1.65V ±1.65V Input Impedance 100kΩ min Linearity ±10% max Modulation Bandwidth (3dB) 10kHz min Output Compatibility HCMOS Output Load 10kΩ//15pF Output Levels Output Low: 0.3V max Output High 2.8V min Rise / Fall Time 4ns max (10% to 90%) Phase Noise (typical) -100dBc/Hz @ 10Hz -125dBc/Hz @ 10Hz -135dBc/Hz @ 100Hz -135dBc/Hz @ 100Hz -135dBc/Hz @ 10kHz -145dBc/Hz @ 10kHz	Load Variation (@ ±5% change)	±50ppb max		
800mA max during warm-up	Supply Voltage	3.3V ±5%		
Control Voltage 1.65V ±1.65V Input Impedance 100kΩ min Linearity ±10% max Modulation Bandwidth (3dB) 10kHz min Output Compatibility HCMOS Output Load 10kΩ//15pF Output Levels Output Low: 0.3V max Output High 2.8V min Rise / Fall Time 4ns max (10% to 90%) Phase Noise (typical) -100dBc/Hz @ 10Hz -125dBc/Hz @ 100Hz -135dBc/Hz @ 10kHz -145dBc/Hz	Current Consumption			
Input Impedance 100kΩ min	Pulling	±5000ppb min		
Linearity ±10% max Modulation Bandwidth (3dB) 10kHz min Output Compatibility HCMOS Output Load 10kΩ//15pF Output Levels Output Low: 0.3V max Output High 2.8V min Rise / Fall Time 4ns max (10% to 90%) Phase Noise (typical) -100dBc/Hz @ 10Hz -125dBc/Hz @ 100Hz -135dBc/Hz @ 10kHz -145dBc/Hz @ 10kHz	Control Voltage	1.65V ±1.65V		
Modulation Bandwidth (3dB) 10kHz min HCMOS Output Load 10kΩ//15pF Output Levels Output Levels Output High 2.8V min Rise / Fall Time 4ns max (10% to 90%) Phase Noise (typical) -100dBc/Hz @ 10Hz -125dBc/Hz @ 10Hz -135dBc/Hz @ 1kHz -145dBc/Hz @ 10kHz	Input Impedance	100kΩ min		
Output CompatibilityHCMOSOutput Load10kΩ//15pFOutput LevelsOutput Low: 0.3V max Output High 2.8V minRise / Fall Time4ns max (10% to 90%)Phase Noise (typical)-100dBc/Hz @ 10Hz -125dBc/Hz @ 100Hz -135dBc/Hz @ 10kHz -145dBc/Hz @ 10kHz	Linearity	±10% max		
Output Load 10kΩ//15pF Output Levels Output Low: 0.3V max Output High 2.8V min Rise / Fall Time 4ns max (10% to 90%) Phase Noise (typical) -100dBc/Hz @ 10Hz -125dBc/Hz @ 100Hz -135dBc/Hz @ 1kHz -135dBc/Hz @ 10kHz	Modulation Bandwidth (3dB)	10kHz min		
Output Levels Output Low: 0.3V max Output High 2.8V min Ans max (10% to 90%) Phase Noise (typical) -100dBc/Hz @ 10Hz -125dBc/Hz @ 100Hz -135dBc/Hz @ 10kHz -145dBc/Hz @ 10kHz	Output Compatibility	HCMOS		
Output High 2.8V min Rise / Fall Time 4ns max (10% to 90%) Phase Noise (typical) -100dBc/Hz @ 10Hz -125dBc/Hz @ 100Hz -135dBc/Hz @ 1kHz -145dBc/Hz @ 10kHz	Output Load	10kΩ//15pF		
-100dBc/Hz @ 10Hz -125dBc/Hz @ 100Hz -135dBc/Hz @ 1kHz -145dBc/Hz @ 10kHz	Output Levels			
-125dBc/Hz @ 100Hz -135dBc/Hz @ 1kHz -145dBc/Hz @ 10kHz	Rise / Fall Time	4ns max (10% to 90%)		
Page 1 of 2	Phase Noise (typical)	-125dBc/Hz @ 100Hz -135dBc/Hz @ 1kHz		
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Nominal Frequency Reference Temperature Reference Voltage Control		25°C ±3°C 1.65V			
Storage Temperature Range		-50 to 90°C			
Packaging			Bulk		
RoHS Status		RoHS Compliant			
Marking Includes		IQD FOQ, Model, Frequency, Date Code			
Page: 2 of 2					
Issue	1				
Date	26th May 2011				
Eng. Approval					
QA Approval					
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