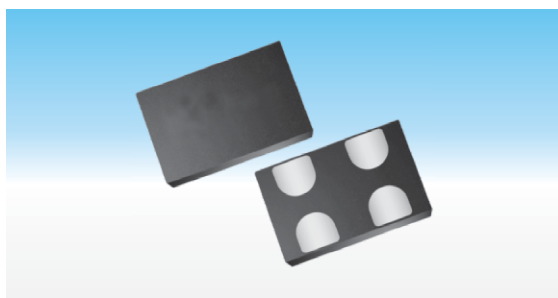


MEMS Oscillator-High Temperature

LQ8918/LQ8919 High-Temperature MEMS Oscillator 1MHz~137MHz Output: CMOS Package: 2016~7050



Features

- Any frequency from 1MHz~110MHz(LQ8918), 115MHz~137MHz (LQ8919), accurate to 6 decimal places
- Low power consumption of 3.5mA typical at 1.8V
- LVCMOS /LVTTTL compliant output
- Excellent total frequency stability: ± 20 ppm
- Operating temperature: $-40\sim+125^{\circ}\text{C}$, for AEC-Q100 oscillators
- Application for industrial, Medical, Industrial sensors, Motor sevro, PLC, Asset tracking system, High temperature applications, etc
- RoHS Compliant /Pb Free



Standard Specifications

Item	Type	LQ8008 Low Power MEMS Oscillator	LQ8009 Low Power MEMS Oscillator
Output Type		LVCMOS /HCMOS	
Load condition		15pF	
Frequency Range		1MHz~110MHz	115.194001MHz~137MHz
Supply Voltage		1.8V, 2.5V, 2.8V, 3.0V, 3.3V, 2.25V~3.63V	
Frequency Stability (All Condition)		± 20 ppm, ± 25 ppm, ± 30 ppm, ± 50 ppm	
Current Consumption		4.7mA max.	8mA max.
OE Disable Current		4.5mA max.	4.7mA max.
Stand-by Current		8.5 μ A max.	
Symmetry		45~55%	
0 Level Output Voltage (V _{OL})		0.1 \times V _{CC} max.	
1 Level Output Voltage (V _{OH})		0.9 \times V _{CC} min.	
Rise Time / Fall Time		3ns max.	
OE Pin 0 Level Input Voltage (V _{IL})		0.3 \times V _{CC} max.	
OE Pin 1 Level Input Voltage (V _{IH})		0.7 \times V _{CC} min.	
Input Pull-up Impedance		50~150K Ω (Pin1 OE or ST logic high)	
		2M Ω min. (Pin1 ST logic low)	
Start-up Time		5ms max.	
Enable/Disable Time		130ns max.	
Resume Time		5ms max.	
RMS Period Jitter		3ps max.	
Peak to Peak Period Jitter		25ps max.	30ps max.
RMS Phase Jitter (12KHz~20MHz)		2.0ps max.	
Long Term Jitter		100ps max.	
Cycle-to-Cycle Jitter		30ps max.	
Operating Temperature Range		$-20\sim+70^{\circ}\text{C}$, $-40\sim+85^{\circ}\text{C}$, $-55\sim+85^{\circ}\text{C}$. $-40\sim+105^{\circ}\text{C}$. $-55\sim+125^{\circ}\text{C}$ or specify	
Storage Temperature Range		$-65\sim+150^{\circ}\text{C}$	
Package Size (L \times W \times H) (Unit: mm)		2.0 \times 1.6 \times 0.8, 2.5 \times 2.0 \times 0.8, 3.2 \times 2.5 \times 0.8, 5.0 \times 3.2 \times 0.8, 7.0 \times 5.0 \times 1.0	
Footprint Package		4-Pin Package	