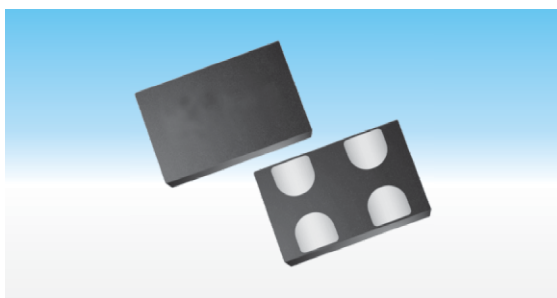


MEMS Oscillator-Ultra Performance

LQ8208/LQ8209 Ultra-Performance MEMS Oscillator 1MHz~220MHz Output: CMOS Package: 2520~7050



Features

- Any frequency from 1MHz~80MHz(LQ8208), 80MHz~220MHz (LQ8209), accurate to 6 decimal places
- Low power consumption of 3.5mA typical at 1.8V
- LVCMOS /LVTTTL compliant output
- Excellent total frequency stability: ± 10 ppm
- Ultra low phase jitter: 0.5ps (12KHz~20MHz)
- Application for ethernet, SATA, SAS, SONET, PCI Express, Video, Wireless, PC, Storage, Network, Telecom, Industrial control, etc
- RoHS Compliant /Pb Free



Standard Specifications

Item	Type	LQ8208 Ultra-Performance MEMS Oscillator	LQ8209 Ultra-Performance MEMS Oscillator
Output Type		LVCMOS /LVTTTL	
Load condition		15pF	
Frequency Range		1MHz~80MHz	80MHz~220MHz
Supply Voltage		1.8V, 2.5V, 2.8V, 3.3V	
Frequency Stability (All Condition)		± 10 ppm, ± 20 ppm, ± 25 ppm, ± 50 ppm	
Current Consumption		33mA max.	36mA max.
OE Disable Current		31mA max.	
Stand-by Current		70 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		2.0ns 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		10ms max.	
Enable/Disable Time		150ns max.	115ns max.
Resume Time		10ms max.	
RMS Period Jitter		3ps max.	
RMS Phase Jitter (12KHz~20MHz)		0.5ps Typical	
First Year Aging (@25°C)		± 1.5 ppm max.	
10-Year Aging (@25°C)		± 5 ppm max.	
Operating Temperature Range		-20~+70C. -40~+85°C, -55~+85°C . -40~+105°C . -55~+125°C or specify	
Storage Temperature Range		-65~+150°C	
Package Size (L \times W \times H) (Unit: mm)		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	