

噪声传感器

Noise Sensor

CZ-038系列

本系列传感器采用驻极体作为敏感元件，用于测量环境噪声。它为机电一体化产品，供电电源（+12V）通过外接1kΩ电阻对产品供电就可以进行测量。

性能指标

声压灵敏度 (S) $11 \pm 1.6 \sim 290 \pm 20 \text{mv}/124 \text{dB}$

动态范围幅值线性度 (R) $85 \sim 170 \text{dB} \leq 2\%$

声压频响: $50 \sim 1000 \text{Hz}$ 内不平度 $\leq \pm 1 \text{dB}$,

$50 \sim 8000 \text{Hz}$ 内不平度 $\leq \pm 3 \text{dB}$

灵敏度温度误差: $(-40 \sim +50^\circ \text{C}) \leq \pm 2.5 \text{dB}$

输出偏压: 电源电压为 $+12 \pm 0.5 \text{V}$ 时, 输出直流偏压为 $+4 \sim 7 \text{V}$

Electret is the sensing element to measure environmental noise. It is electromechanical integration products with (+12 v) power supply and an external 1 k Ω resistance.

Performance Index

Sound pressure sensitivity (S) $11 + / - 1.6 \sim 290 + 20 \text{ mv} / 124 \text{ db}$

Dynamic range of amplitude linearity (R) $85 \sim 170 \text{ dB} \leq 2\%$

frequency response: $50 \sim 1000 \text{ Hz}$ irregularity in Passband $\leq \pm 1 \text{ dB}$, $50 \sim 8000 \text{ Hz}$ irregularity in Passband $\leq \pm 3 \text{ dB}$

Sensitivity-temperature-error: $(-40 \sim +50^\circ \text{C}) \leq \pm 2.5 \text{ dB}$

output bias: DC bias is $+4 \sim 7 \text{ V}$ at $+12 \pm 0.5$

