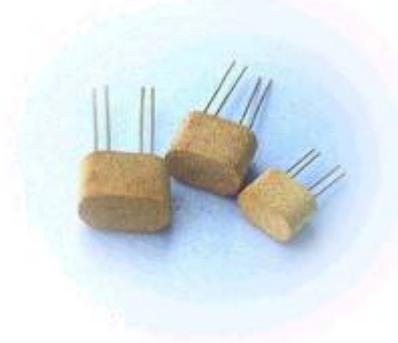


MD62 Thermal conductor CO₂ Gas sensor

MD62 gas sensor consists of an active element and a reference element with the same resistance, both elements are placed in a wheatstone bridge circuit, The analyzing gas contents changes, the overall thermal coefficient of mixed gases changed correspondingly; when the active element meet the combustible gas, its resistance become smaller, when It meet other gas, , Its resistance become larger(air background), the bridge circuit output the voltage change, this change increase according to gas concentration, the reference element as a benchmark while for temperature compensation.

Features

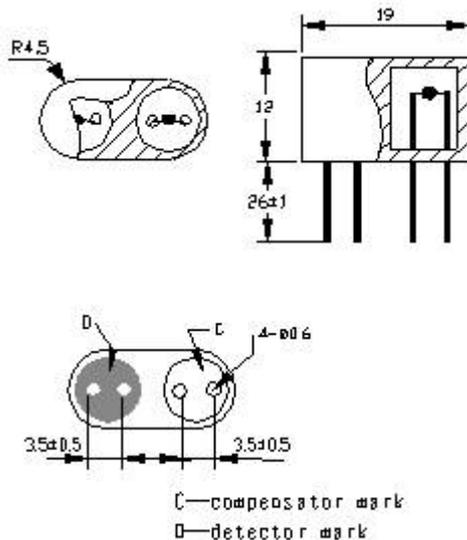
- Wide Detecting Range (0—100%VOL)
- Linear output signal
- Quick response
- Good reproducibility and reliable performance
- Resistant to toxicosis
- Detecting without Oxygen or short of oxygen



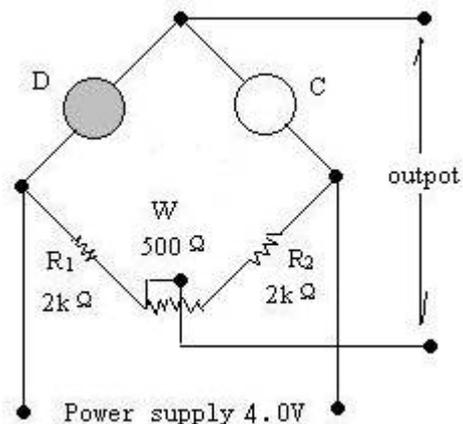
Application

Domestic, Industrial spot for CO₂、C₂H₆、freon、Natural gas, LPG etc detecting.

Structure



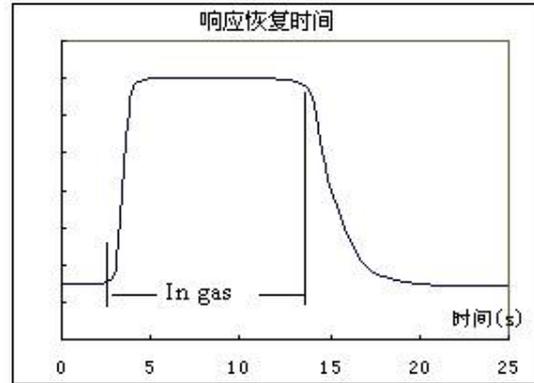
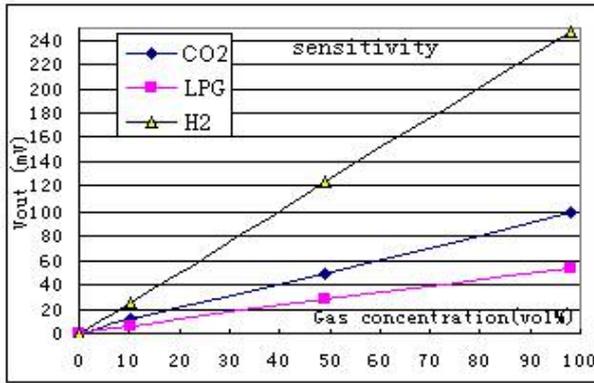
Basic testing circuit



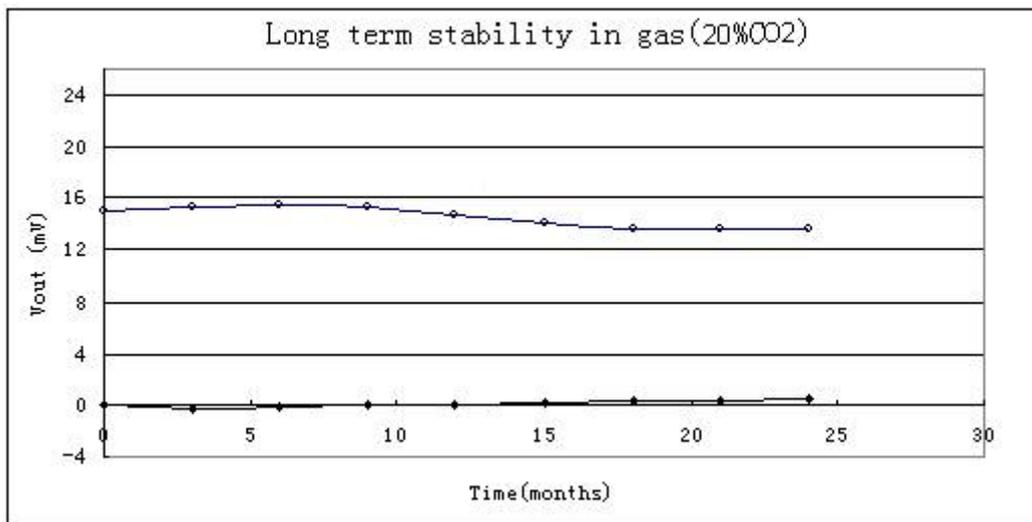
Specification

Detecting Range	0~100% vol	
Working Voltage (V)	3.0±0.1	
Working current(mA)	@100	
Sensitivity mV	10% Methane	>12
	10% Butane	>8
	10% CO ₂	>5
linearity (%)	0~5	
Response time (90%)	>10sec	
Resume time (90%)	>30sec	
Using Environment	-20—+60℃ <95%RH	
Storage Environment	-30—+80℃ <95%RH	
Dimension (mm)	10×14×18	

Sensitivity and response characteristic

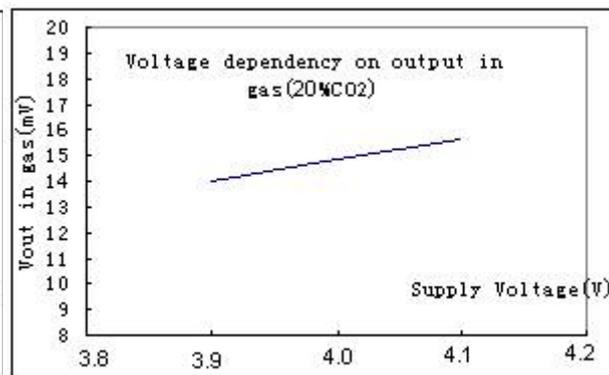
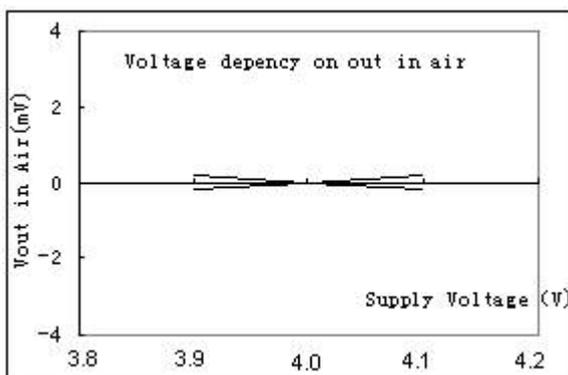


Long term stability



The drift in air is less than 2 mV per year, in 20%CO₂ the drift is less than 2mV. for a short period storage (in 2 weeks), the sensor need 30mins' preheating to stabilize, for more than one year storage, it need more than 24 hours' preheating.

MD62 output signal dependency on working voltage



Note

- △ The sensor sensitivity need to calibrate termly.
- △ When debugging, should strict to control the heating voltage or current, do not exceed rated voltage to burn the sensor.
- △ For long period storage, do not put it in wet and corrosive environment.
- △ Shocking, falling, and mechanical destroying is prohibited