

TECHNICAL DATA

MQ-3 GAS SENSOR

FEATURES

- * High sensitivity to alcohol and small sensitivity to Benzine .
- * Fast response and High sensitivity
- * Stable and long life
- * Simple drive circuit

APPLICATION

They are suitable for alcohol checker, Breathalyzer.

SPECIFICATIONS

A. Standard work condition

Symbol	Parameter name	Technical condition	Remarks
Vc	Circuit voltage	5V±0.1	AC OR DC
VH	Heating voltage	5V±0.1	ACOR DC
RL	Load resistance	200K Ω	
RH	Heater resistance	33 Ω ± 5%	Room Tem
PH	Heating consumption	less than 750mw	

B. Environment condition

Symbol	Parameter name	Technical condition	Remarks
Tao	Using Tem	-10°C -50°C	
Tas	Storage Tem	-20°C -70°C	
RH	Related humidity	less than 95%RH	
O ₂	Oxygen concentration	21%(standard condition)Oxygen concentration can affect sensitivity	minimum value is over 2%

C. Sensitivity characteristic

Symbol	Parameter name	Technical parameter	Remarks
Rs	Sensing Resistance	1M Ω - 8 M Ω (0.4mg/L alcohol)	Detecting concentration scope: 0.05mg/L~10mg/L Alcohol
	Concentration slope rate	≤0.6	
	Standard detecting condition	Temp: 20°C ± 2°C Humidity: 65% ± 5%	
	Preheat time	Over 24 hour	
	D. Structure and configuration, basic measuring circuit		

Parts	Materials
1 Gas sensing layer	SnO ₂
2 Electrode	Alu
3 Electrode line	Pt
4 Heater coil	Ni-Cr alloy
5 Tubular ceramic	Al ₂ O ₃
6 Anti-explosion network	Stainless steel gauze (SUSS16 100-mesh)
7 Clamp ring	Copper (plate Ni)
8 Resin base	Bakelite
9 Tube Pin	Copper (plate Ni)

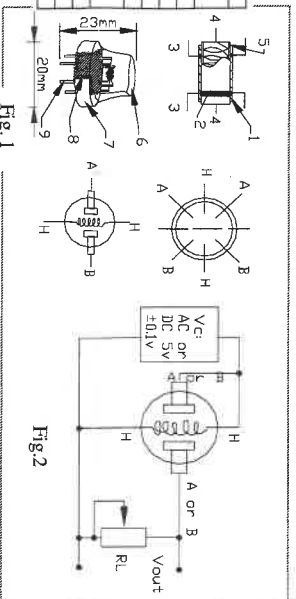
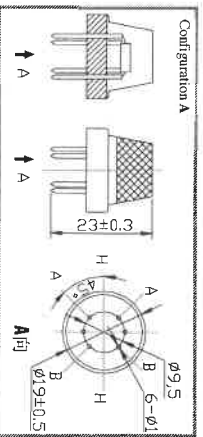
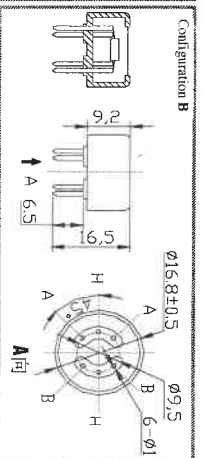


Fig. 1

Fig.2



Configuration A



Configuration B