

Detecting abnormal state and driver function IC for gas stove

MM3841



Outline

MM3841 is an abnormality detection IC for gas stoves, and contains flame detection amplifier, battery voltage detection, thermistor temperature detection, and gas valve control. The amplifier detects the electromotive force of the thermocouple with high accuracy, and shuts off the gas valve safely if the flame is lost during combustion. In addition, battery voltage and thermistor temperature can be detected, and shut off the gas valve safely in abnormality state. When an abnormal detect, the buzzer and LED control output can notify the abnormal occurrence.

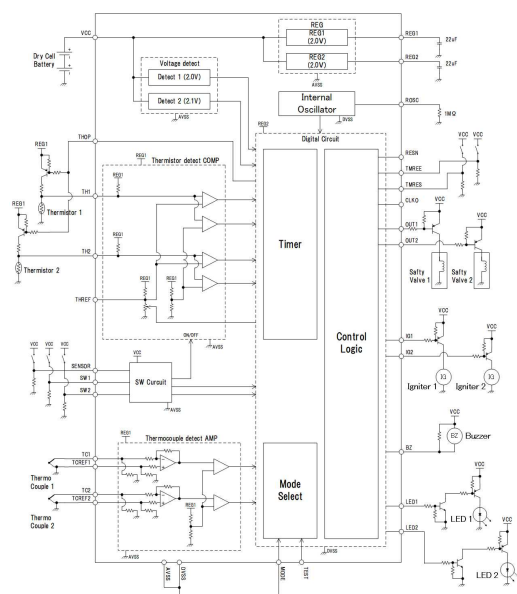
Applications

- Gas stove
- Gas cooking appliance

Features

- Built-in battery voltage detection
Detect voltage : 2.0V or less (Warning 2.1V)
- Safety valve control output
1 coil-type and 2 coil-type controllable
- Igniter control output
- Buzzer and LED control output
- Built-in continuous use time limit timer
- Current consumption : 1mA typ.

Block Diagram



Specification

Item	Specification	Unit
Operation temperature	-20~85	°C
Power supply range	1.96~5.5	V
Current consumption (Normal)	1	mA
Current consumption (Stand-by)	0.01	μA
Flame detection voltage	-1.8±0.5	mV
Thermistor temperature detection voltage	0.426±3%	V
Battery voltage warning voltage	2.1~2.0	V
Battery voltage detection voltage	2.0	V
Reset detection voltage	1.65	V
REG output voltage	2.0	V

Package

•SSOP-30

