Global Mixed-mode Technology Inc.

G707

Programmable Remote Thermal Diode Temperature Switch

Features

- ±1.0°C Typical Threshold Accuracy
- ±3.0°C (max) Threshold Accuracy (+60°C to +100°C)
- Temperature Threshold Set by Pin SET0, SET1
- Open-Drain Active Low Output Stage
- Pin-Selectable 2°C or 10°C Hysteresis
- SOP-8 and MSOP-8 Packages

Applications

- μP Temperature Monitoring in High-Speed
- Computers
- Temperature Control
- Temperature Alarms
- Fan Control
- Automotive

General Description

The G707 is a fully integrated, programmable remote thermal diode temperature switch with a threshold set by pin-strapping SET0 and SET1. The remote diode is a diode-connected transistor typically low-cost, easily mounted 2N3904 NPN type, 2N3906 PNP type transistor or CPU/GPU build-in thermal diode. It requires only let pin SET0 and SET1 tie to GND, VCC or floating to set the temperature threshold within a 60°C to +124°C temperature range. The G707 provides an open-drain, active low output. This switch operates with a +3.0V to +5.5V single supply while providing a temperature threshold accuracy of ±1.0°C (TYP) or ±3.0°C (max, +60°C to +100°C). Hysteresis is pin selectable to 2°C or 10°C.

Ordering Information

ORDER NUMBER	MARKING	TEMP. RANGE	PACKAGE (Pb free)
G707P11U	G707	-40°C~+125°C	SOP-8
G707P81U	G707	-40°C~+125°C	MSOP-8

Note: P1 : SOP-8   P8 : MSOP-8

　　　1: Bonding Code

　　　U : Tape & Reel

Pin Configuration

G707

VCC 1	8 SET0
DXP 2	7 SET1
DXN 3	6 HYST
$\overline{\text{THERM}}$ 4	5 GND

SOP-8/MSOP-8
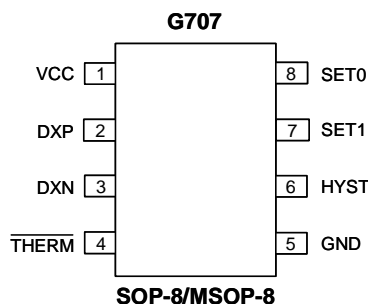
Typical Application Circuit