

5A Low-Dropout Linear Regulator

Features

- Adjustable or Fixed Output Voltage 1.5V, 1.8V, 2.5V, 3.3V and 5.0V
- Internal Short Circuit Current Limiting
- Internal Over Temperature Protection
- Output Current 5A
- 1.5V max. Dropout Voltage at 5A Load Current
- TO-252, TO-263 and TO-263T Package

Applications

- PC Motherboard
- Post Regulation for Switching DC/DC Converter
- High Efficiency Linear Regulator
- Battery Powered Instrumentation

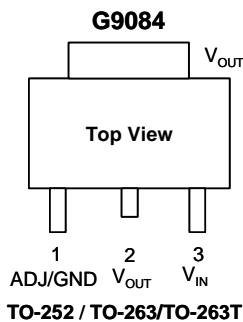
General Description

The G9084 is a low dropout linear regulator to provide well regulated supply for applications requiring lower voltage from such as, 3.3V PC ATX power supplies.

The G9084 provides over temperature and over current protection circuits to prevent it from being damaged by abnormal operating conditions.

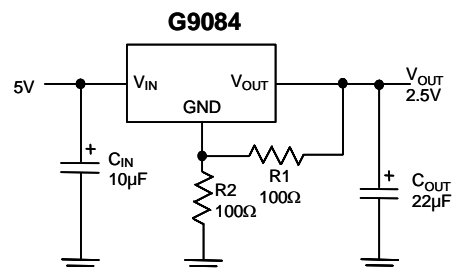
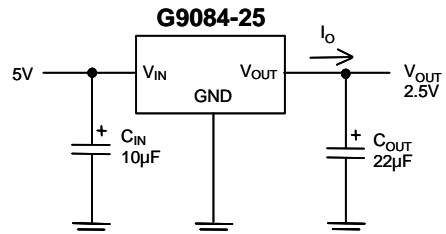
A 22μF tantalum electrolytic capacitor is recommended at the output to improve the transient response and stability.

Package Type



Typical Application Circuit

[Note 4]: Type of C_{OUT}



Note: $V_o = V_{REF} (1 + R_2/R_1) + I_{ADJ} \times R_2$

Ordering Information

| ORDER NUMBER | MARKING | VOLTAGE | TEMP. RANGE | PACKAGE (Pb free/Green) | REMARK |
|--------------|----------|------------|----------------|-------------------------|-----------------|
| G9084T43U | G9084 | Adjustable | -40°C to +85°C | TO-252 | |
| G9084-15T43U | G9084-15 | 1.5V | -40°C to +85°C | TO-252 | |
| G9084-18T43U | G9084-18 | 1.8V | -40°C to +85°C | TO-252 | |
| G9084-25T43U | G9084-25 | 2.5V | -40°C to +85°C | TO-252 | |
| G9084-33T43U | G9084-33 | 3.3V | -40°C to +85°C | TO-252 | |
| G9084-50T43U | G9084-50 | 5.0V | -40°C to +85°C | TO-252 | |
| G9084T43D | G9084 | Adjustable | -40°C to +85°C | TO-252 | |
| G9084-15T43D | G9084-15 | 1.5V | -40°C to +85°C | TO-252 | |
| G9084-18T43D | G9084-18 | 1.8V | -40°C to +85°C | TO-252 | |
| G9084-25T43D | G9084-25 | 2.5V | -40°C to +85°C | TO-252 | |
| G9084-33T43D | G9084-33 | 3.3V | -40°C to +85°C | TO-252 | |
| G9084-50T43D | G9084-50 | 5.0V | -40°C to +85°C | TO-252 | |
| G9084T53U | G9084 | Adjustable | -40°C to +85°C | TO-263 | |
| G9084-15T53U | G9084-15 | 1.5V | -40°C to +85°C | TO-263 | |
| G9084-18T53U | G9084-18 | 1.8V | -40°C to +85°C | TO-263 | |
| G9084-25T53U | G9084-25 | 2.5V | -40°C to +85°C | TO-263 | |
| G9084-33T53U | G9084-33 | 3.3V | -40°C to +85°C | TO-263 | |
| G9084-50T53U | G9084-50 | 5.0V | -40°C to +85°C | TO-263 | |
| G9084TU3U | G9084 | Adjustable | -40°C to +85°C | TO-263T | OBSOLETE |
| G9084-15TU3U | G9084-15 | 1.5V | -40°C to +85°C | TO-263T | OBSOLETE |
| G9084-18TU3U | G9084-18 | 1.8V | -40°C to +85°C | TO-263T | OBSOLETE |
| G9084-25TU3U | G9084-25 | 2.5V | -40°C to +85°C | TO-263T | OBSOLETE |
| G9084-33TU3U | G9084-33 | 3.3V | -40°C to +85°C | TO-263T | OBSOLETE |
| G9084-50TU3U | G9084-50 | 5.0V | -40°C to +85°C | TO-263T | OBSOLETE |

* For other package types and pin options, please contact us at sales@gmt.com.tw

Note: T4 :TO-252 T5 : TO-263 TU : TO-263T

3: Bonding Code
 U & D: Tape & Reel