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.

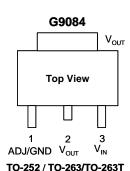
The G9084 provides over temperature and over current protection circuits to prevent it from being damaged by abnormal operating conditions.

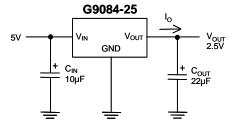
A 22µF tantalum electrolytic capacitor is recommended at the output to improve the transient response and stability.

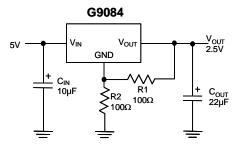
Package Type

Typical Application Circuit

[Note 4]: Type of C_{OUT}







Note: $V_O = V_{REF} (1 + R2/R1) + I_{ADJ} xR2$