

# 1.5A Low-Dropout Linear Regulator

## Features

- Adjustable or fixed output voltage 1.5V, 1.8V, 2.5V, 3.3V and 5.0V
- TO-252 and TO-263T package
- Internal short circuit current limiting
- Internal over temperature protection
- Output current 1.5A
- 1.5V max. dropout voltage at 1.5A load current

## Applications

- PC Motherboard
- Post regulation for switching DC/DC converter
- High efficiency linear regulator
- Battery powered instrumentation

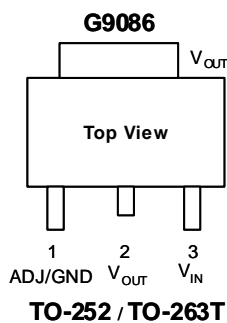
## General Description

The G9086 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 G9086 provides over temperature and over current protection circuits to prevent it from being damaged by abnormal operating conditions.

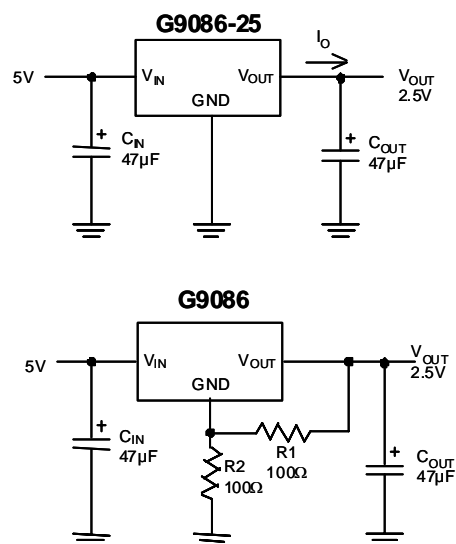
A 100μF tantalum electrolytic capacitor is recommended at the output to improve the transient response and stability.

## Package Type



## Typical Application Circuit

[Note 4]: Type of C<sub>OUT</sub>



Note:  $V_o = V_{REF} (1 + R2/R1) + I_{ADJ} \times R2$

**Ordering Information**

ORDER NUMBER	MARKING	VOLTAGE	TEMP. RANGE	PACKAGE (Pb free/Green)	REMARK
G9086T43U	G9086	Adjustable	-40°C to +85°C	TO-252	
G9086-15T43U	G9086-15	1.5V	-40°C to +85°C	TO-252	
G9086-18T43U	G9086-18	1.8V	-40°C to +85°C	TO-252	
G9086-25T43U	G9086-25	2.5V	-40°C to +85°C	TO-252	
G9086-33T43U	G9086-33	3.3V	-40°C to +85°C	TO-252	
G9086-50T43U	G9086-50	5.0V	-40°C to +85°C	TO-252	
G9086T43D	G9086	Adjustable	-40°C to +85°C	TO-252	
G9086-15T43D	G9086-15	1.5V	-40°C to +85°C	TO-252	
G9086-18T43D	G9086-18	1.8V	-40°C to +85°C	TO-252	
G9086-25T43D	G9086-25	2.5V	-40°C to +85°C	TO-252	
G9086-33T43D	G9086-33	3.3V	-40°C to +85°C	TO-252	
G9086-50T43D	G9086-50	5.0V	-40°C to +85°C	TO-252	
G9086TU3U	G9086	Adjustable	-40°C to +85°C	TO-263T	<b>OBSOLETE</b>
G9086-15TU3U	G9086-15	1.5V	-40°C to +85°C	TO-263T	<b>OBSOLETE</b>
G9086-18TU3U	G9086-18	1.8V	-40°C to +85°C	TO-263T	<b>OBSOLETE</b>
G9086-25TU3U	G9086-25	2.5V	-40°C to +85°C	TO-263T	<b>OBSOLETE</b>
G9086-33TU3U	G9086-33	3.3V	-40°C to +85°C	TO-263T	<b>OBSOLETE</b>
G9086-50TU3U	G9086-50	5.0V	-40°C to +85°C	TO-263T	<b>OBSOLETE</b>

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

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

3: Bonding Code

U & D: Tape & Reel