1.8A Low Dropout Regulator with Enable

Features

- **Adjustable Output from 1.2V to 5V Using External Resistors**
- **1.5V, 1.8V and 2.5V Options by Setting ADJ Pin Below 0.2V**
- **Over Current and Over Temperature Protection**
- **500mV Dropout @1.5A**
- **Enable Pin**
- **10μA Quiescent Current in Shutdown**
- **1.5V, 1.8V and 2.5V Fixed Vo Options by Setting ADJ Pin Below 0.2V**
- **SOT-223-5 and SOP-8 Package**

Applications

- **Battery Powered Systems**
- **Motherboards**
- **Peripheral Cards**
- **Network Cards**
- **Set Top Boxes**
- **Medical Equipment**
- **Notebook Computers**

General Description

The G965 is a high performance positive voltage regulator designed for use in applications requiring very low dropout voltage at up to 1.8 Amps. Since it has superior dropout characteristics compared to regular LDOs, it can be used to supply 2.5V on motherboards or 1.5V, 1.8V on peripheral cards from the 3.3V supply thus allowing the elimination of costly heatsinks. An enable pin further reduces power dissipation while shut down. The G965 provides excellent regulation over variations in line, load and temperature.

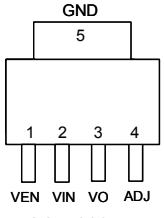
The G965 is available with 1.5V, 1.8V and 2.5V internally preset outputs that are also adjustable using external resistors.

Ordering Information

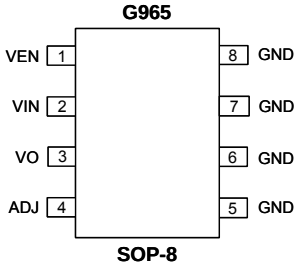
ORDER NUMBER (Pb free / Green)	MARKING	TEMP. RANGE	PACKAGE
G965-15ADJTS1Uf	G965-15	-40°C ~ +85°C	SOT-223-5
G965-18ADJTS1Uf	G965-18	-40°C ~ +85°C	SOT-223-5
G965-25ADJTS1Uf	G965-25	-40°C ~ +85°C	SOT-223-5
G965-15ADJP1Uf	G965-15	-40°C ~ +85°C	SOP-8
G965-18ADJP1Uf	G965-18	-40°C ~ +85°C	SOP-8
G965-25ADJP1Uf	G965-25	-40°C ~ +85°C	SOP-8

Note: TS: SOT-223-5 P1: SOP-8
1: Bonding Code
U : Tape & Reel
e.g. 18 denotes the 1.8V output voltage.

Pin Configuration

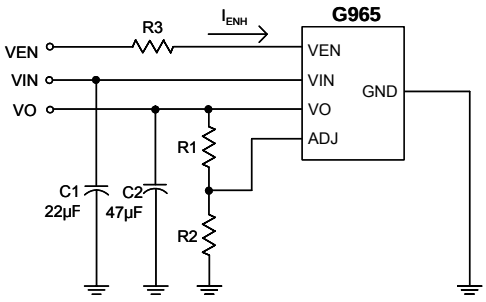


SOT-223-5



SOP-8

Typical Application Circuit



$$VO = \frac{1.2\ (R1+R2)}{R2}\ \text{Volts}$$

R2=12kΩ is recommended
R3 should be connected for current I_{ENH} restriction as $V_{EN} > V_{IN}+0.3V$
R2=0Ω sets V_O to fixed output mode.