5A Very Low Dropout Voltage Regulator

FEATURES

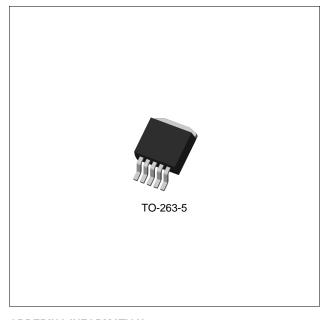
- Guaranteed Output Current of 5.0A
- Very Low Dropout Voltage
- 1% Initial Accuracy
- Good Line and Load Regulation
- Fast Transient Response
- Adjustable Output Voltage up to 15V
- TTL/CMOS Compatible Enable Logic
- Over-Temperature/Over-Current Protection
- −40°C to 125°C Junction Temperature Range
- Available in TO-263-5L Package
- Moisture Sensitivity Level 3

APPLICATIONS

- Battery Powered Equipment
- Motherboards and Graphic Cards
- Microprocessor Power Supplies
- Peripheral Cards
- High Efficiency Linear Regulators
- Battery Chargers

DESCRIPTION

The TPS75501 is 5.0A low-dropout linear voltage regulators that provide a low voltage, high-current output with a minimum of external components. The TPS75501 offers extremely low dropout (typically 400mV at 5.0A) and low ground current (typically 70mA at 5.0A). The TPS75501 is ideal for PC add-in cards that need to convert from standard 5V or 3.3V down to new, lower core voltages. A guaranteed maximum dropout voltage of 500mV over all operating conditions allows the TPS75501 to provide 2.5V from a supply as low as 3V. The TPS75501 also has fast transient response for heavy switching applications. The device requires only 47µF of output capacitance to maintain stability and achieve fast transient response. The TPS75501 is fully protected with over current limiting, thermal shutdown, reversed-battery protection, reversed-leakage protection, and reversedlead insertion. The TPS75501 offers a TTL-logic compatible enable pin. The TPS75501 comes in the TO-263 package and is an ideal upgrade to older, NPNbased linear voltage regulators.



ORDERING INFORMATION

Device	Package
TPS75501R	TO-263-5L

TPS75501

Please contact us for more information about this product.