

DESCRIPTION

The RS2596 is Monolithic IC that design for a step-down DC/DC Converter, and own the ability of driving a 3A load without additional transistor component.

The output version included 3.3V, 5V, 12V and an adjustable type. It operates at a switching frequency of 150KHz thus allowing smaller sized filter components than what would be needed with lower frequency switching regulators. Other features include a guaranteed 4% tolerance on output voltage under specified input voltage and output load conditions, and 15% on the oscillator frequency. Regarding protected function, thermal shutdown is to prevent over temperature operating from damage, and current limit is against over current operating of the output switch.

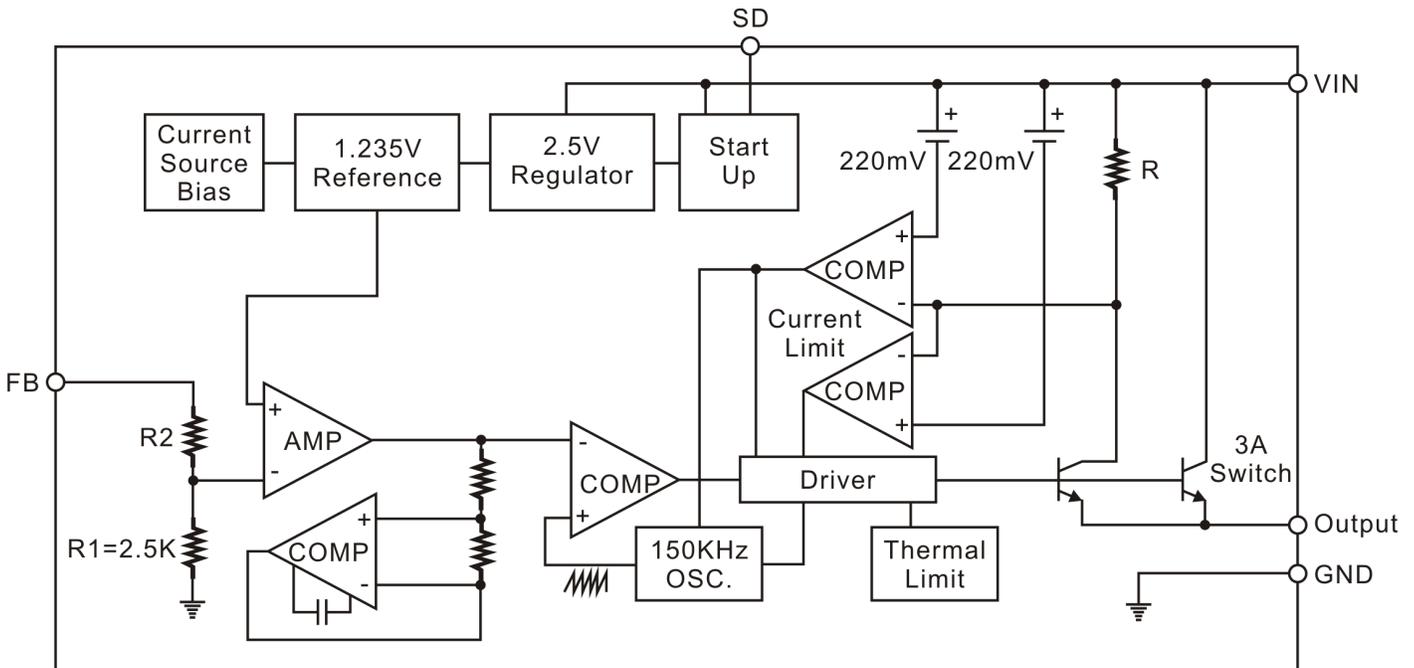
FEATURES

- 3.3V, 5V, 12V and adjustable
- Adjustable version output voltage range: 1.23-37V
- 4% max over line and load conditions
- 150KHz 15% fixed switching frequency
- TTL shutdown capability
- Operating voltage can be up to 40V
- Output load current: 3A
- TO220-5, TO263-5 packages
- Low power standby mode
- Thermal-shunt down and current-limit protection
- Built-in switching a transistor on chip, requires only 4 external components

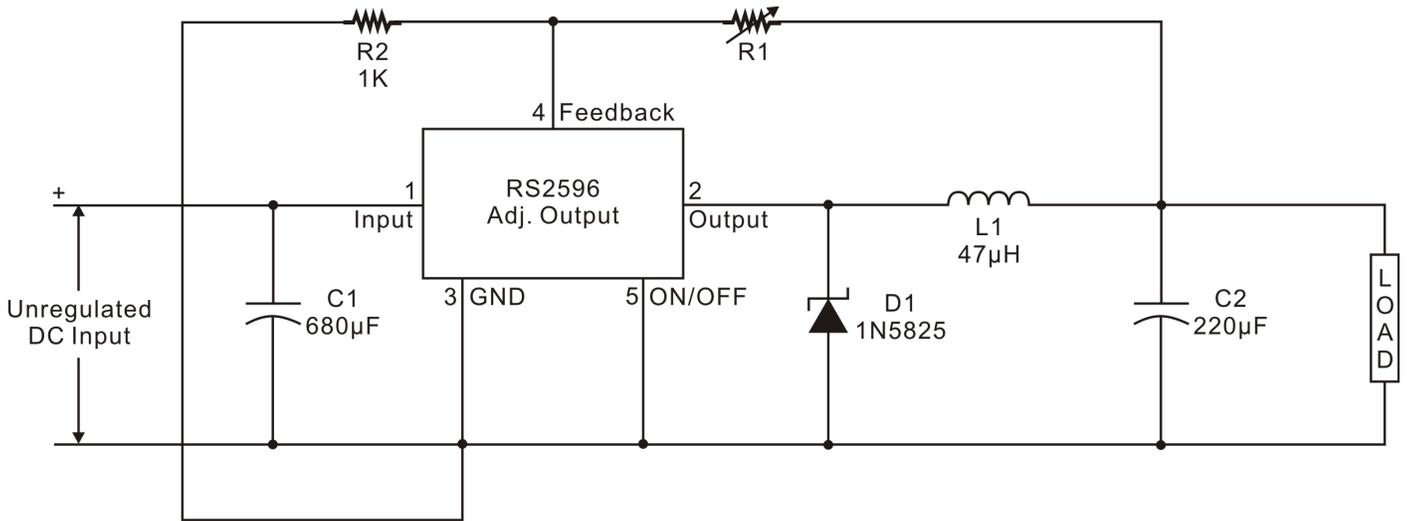
APPLICATIONS

- Simple High-efficiency step-down regulator
- Positive to negative converter
- On-card switching regulators

BLOCK DIAGRAM



APPLICATION CIRCUIT

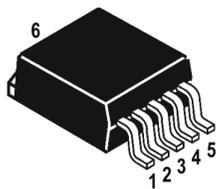


ORDER INFORMATION

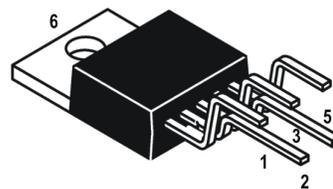
Device	Device Code
RS2596-XX Y Z	<p>XX is nominal output voltage (for example, AD=ADJ, 33=3.3V, 50=5.0V, 12=12V).</p> <p>Y is package designator: U: TO-263-5 E: TO-220-5</p> <p>Z is Lead Free designator: P: Commercial Standard, Lead (Pb) Free and Phosphorous (P) Free Package G: Green (Halogen Free with Commercial Standard)</p>

PIN CONFIGURATION

TO-263-5



TO-220-5



PIN DESCRIPTION

Pin Name	Description	Pin No.	
		TO-263-5	TO-220-5
VIN	Regulator Input Pin	1	1
VOUT	Regulator Output Pin	2	2
GND	Ground Pin	3, 6	3, 6
FB	Output Voltage Feed Back Control Pin	4	4
SD	ON/OFF Shutdown Pin	5	5

IMPORTANT NOTICE

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