# J&T Electronics

## Wide Range Synchronous Buck Controller

#### **Feature**

- Wide Input Operation Voltage Range: 8V to 40V
- Absolute Maximum Input Supply Voltage: 42V
- Input Protection Mode Trigger Voltage: 32V
- Up to 93% Efficiency
- Programmable Switching Frequency up to up to 500kHz
- No Loop Compensation Required
- Programmable current limit
- Thermal Shutdown
- Available in SOP-8L Package

### **Application**

- Car Charger / Adaptor
- Pre-Regulator for Linear Regulators
- Distributed Power Systems
- Battery Charger

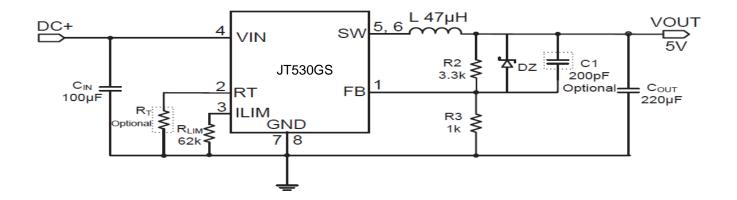
### **Description**

The JT530GS-AGN is a synchronous step down regulator from a high voltage input supply. Operating with a wide input voltage range, the JT530GS-AGN achieves 3.2A continuous output current with excellent load and line regulation. The switching frequency is programmable from 130 kHz to 500 kHz and the synchronous architecture provides for highly efficient designs. Current mode operation provides fast transient response and eases loop stabilization.

The JT530GS-AGN requires a minimum number of readily available standard external components. Other features include cable compensation, programmable current limit and thermal shutdown.

The JT530GS-AGN converters are available in the industry standard SOP-8L packages.

### **Typical Application Circuit**



Application1: No Output Cable Resistance Compensation (Note 1)

Note 1: No DZ and C1 required in Application for Quick Charge.