

DESCRIPTION

HC2015 has an optimum input voltage, step-down converter that operates in either CV (Constant Output Voltage) mode or CC (Constant Output Current) mode. The maximum input voltage is up to 36V and the operation input voltage from 8.5V to 32V.

MOSFET, what build in 40mΩ High-Side and 22mΩ Low-Side, could deliver up to 3.6A of continuous output current.

External compensation is not needed. The line compensation and the constant current can be set by an external resistance.

In conclusion, HC2015 is a full function and high performance, high reliability buck DC-DC converter.

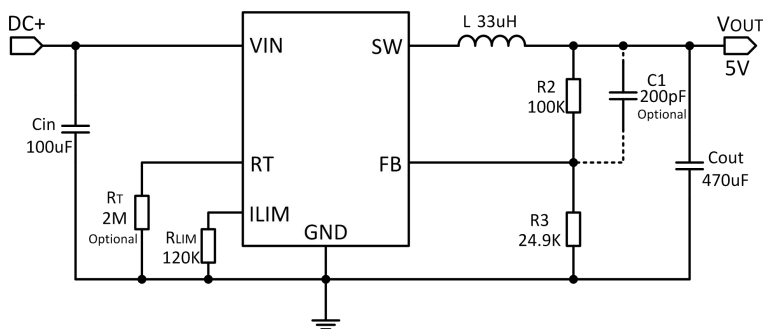
FEATURES

- Build in High-Side and Low-Side MOSFET
- Max Output Current: 3.6A
- Adjustable Output Voltage, $V_{FB}=1V$
- Constant Voltage Accurate: $\pm 2\%$
- No External Compensation Needed
- Efficiency: Up to 94%
- Programmable Switching Frequency from 110kHz to 330kHz
- Short Circuit Protection
- Over Voltage Protection
- Thermal shutdown Protection
- Under Voltage Lock-Out
- Available in SOP-8 package
- ESD HBM >5KV

APPLICATIONS

- Car DVD
- Black Box
- Car Charger
- Industry Application

TYPICAL APPLICATION

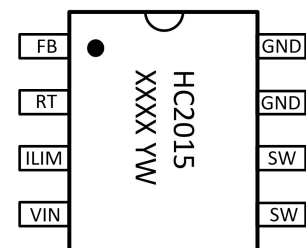


Note: 1) It is recommended to use C_{in} and C_{out} as high-frequency low-ESR capacitors for Rubycon and Wurth.

2) The inductor core is recommended for the iron silicone Aluminum ring.

3) R_T is optional. The resistor range is from 330k to 2M. HC2015 can work when keeping R_T pin floating. The default frequency is 110KHZ.

PIN OUT & MARKING



SOP-8

HC2015: Product Code

TXXX: Lot No.

YW: Date code (Year & Week)