

## DESCRIPTION

The TCS4513D are monolithic buck switching regulator based on I2 architecture for fast transient response. Operating with an input range of 4.5V~18V, TCS4513D deliver 3A of continuous output current with two integrated N-Channel MOSFETs. The internal synchronous power switches provide high efficiency without the use of an external Schottky diode. At light loads, TCS4315D operate in low frequency to maintain high efficiency.

TCS4513D guarantee robustness with output short protection, thermal protection, current run-away protection and input under voltage lockout.

TCS4513D are available in SOT23-6 package, which provide a compact solution with minimal external components.

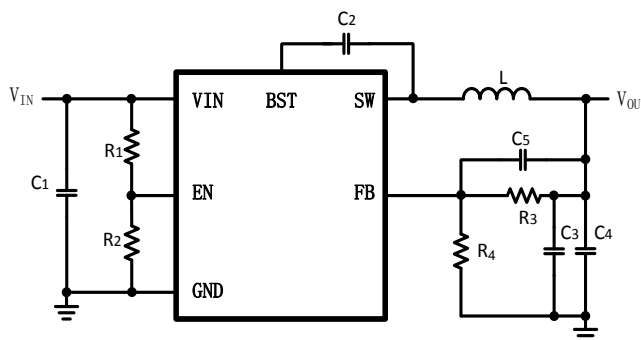
## FEATURES

- 4.5V to 18V operating input range
- 3A output current
- Up to 95% efficiency
- PFM at light load
- 600kHz switching frequency
- Internal soft-start
- Input under-voltage lockout
- Current run-away protection
- Output short protection
- Thermal protection
- Available in SOT23-6 package

## APPLICATIONS

- Distributed Power Systems
- Networking Systems
- FPGA, DSP, ASIC Power Supplies
- Green Electronics/ Appliances
- Notebook Computers

## TYPICAL APPLICATION



## ORDER INFORMATION

| DEVICE <sup>1)</sup> | PACKAGE | TOP MARKING <sup>2)</sup> | ENVIRONMENTAL <sup>3)</sup> |
|----------------------|---------|---------------------------|-----------------------------|
| TCS4513D_F           | SOT23-6 |                           | Green                       |