

42V Input Standoff Voltage, 1A Step-Down Converter in SOT23-6

DESCRIPTION

The ETA2842 is a wide input range, high-efficiency, and high frequency DC-to-DC step-down switching regulator, capable of delivering up to 1A of output current. With a fixed switching frequency of 650KHz, this current mode PWM controlled converter allows the use of small external components, such as ceramic input and output caps, as well as small inductors. ETA2842 also employs a proprietary control scheme that switches the device into a power save mode during light load, thereby extending the range of high efficiency operation. An OVP function protects the IC itself and its downstream system against input voltage surges. With this OVP function, the IC can stand off input voltage as high as 42V, making it an ideal solution for industrial applications such as smart meters as well as automotive applications.

In automotive systems, power comes from the battery, with its voltage typically between 9V and 24V. Including cold crank and double battery jump-starts, the minimum input voltage may be as low as 4V and the maximum up to 36V, with even higher transient voltages. With these high input voltages, linear regulators cannot be used for high supply currents without overheating the regulator. Instead, high efficiency switching regulators such as ETA2842 must be used to minimize thermal dissipation. ETA2842 is available SOT23-6 Packages.

FEATURES

- Wide Input Operating Range from 4V to 38V
- Standoff Input Voltage: 42V
- Output up to 6V
- High Efficiency at 12V In 5V Out: Up to 91%:
- High Efficiency PFM mode at light load
- Capable of Delivering 1A
- No External Compensation Needed
- Current Mode control
- Logic Control Shutdown
- Thermal shutdown and UVLO
- Available in SOT23-6 Package

APPLICATIONS

- Smart Meters
- Industrial Applications
- Automotive Applications

ORDERING INFORMATION

PART #	PACKAGE PIN	TOP MARK
ETA2842S2G-T	SOT23-6	EGYW └── Date Code └── Product Number

TYPICAL APPLICATION

