

## Description

The TCS2205B is a 300mA low dropout linear voltage regulator with 2.1uA low quiescent current, operating input voltage up to 40V, and offering fixed output voltage ranges from 1.5V to 5.0V. Also, the device is designed for use in applications requiring high input voltage in the EN Pin to enable and disable the linear regulator.

Integrating many functions the TCS2205B provides high power supply rejection, and owns excellent line and load transient response with only a small 1uF~10uF ceramic output capacitor. Building internal soft-start minimizes stress on the input power source by reducing capacities inrush current during start-up time. The functions of thermal shutdown, over current and short-circuit protection to protect the device against thermal and current over-loads. A wide fixed output voltage options, making the TCS2205B a very common solution in different applications.

## Feature

- ◆ Output Current Up to 300mA
- ◆ Low Dropout Voltage Typically 330mV at 100mA Output Current Application
- ◆ Low Quiescent Current: 2.1uA
- ◆ Operating Input Voltage Range: 3.0V to 40V
- ◆ Fixed Output Voltage Options: 1.5V to 5.0V
- ◆  $\pm 2\%$  Initial Voltage Accuracy
- ◆ Fast Transient Response Over Line and Load Transient
- ◆ High PSRR: 90dB at 1KHz
- ◆ Build Internal Soft-Start
- ◆ Over Current Protection and Short-circuit Protection
- ◆ Over-temperature Protection
- ◆ Green Product RoHS Compliant and Halogen Free

## Application

- ◆ Vehicular Equipment
- ◆ Battery-powered Equipment
- ◆ Telecom Infrastructure
- ◆ Microprocessor and Chipset Supplies
- ◆ Home Applications
- ◆ Industrial Automation Supplies
- ◆ Servers Device Applications

Package Type : SOT-23-3L to SOT89-3L, SOT23-5L

## Typical Application

