

DESCRIPTION

The PT6905 is a continuous mode inductive step-down converter with three-stage dimming, designed for driving single or multiple series white LEDs efficiently from a voltage source higher than the output LED voltage. The IC operates from an input supply between 6V and 36V and provides three-stage dimming with output current of up to 1.2Amp.

The PT6905 includes the internal switch and a high-side output current sensing circuit, which uses an external resistor to set the average output current.

The PT6905 has a three-stage dimming function. The output current can be adjusted to 100%, 30% and 10% respectively by power-on and off repeatedly. An external capacitor C_s is used to sustain enough voltage level to ensure the internal logic work properly in a short period (< 6 s with a 10 μ F C_s). And the power could be saved if less light needed.

FEATURES

- High Efficiency (up to 95%)
- Maximum 1.2A Output Current
- Wide Input Voltage: 6V ~ 36V
- Three-Stage ON/OFF Dimming
- $\pm 5\%$ Output Current Accuracy
- Thermal Shutdown 150°C Typical
- SOT-89-5L Package

APPLICATIONS

- DC/DC LED Driver
- Low Voltage Industrial LED Lighting
- Low Voltage Halogen Replacement LEDs
- Decorative LED Lighting
- LED Table Lighting

BLOCK DIAGRAM

