Product Overview

FL77944: Analog/PWM Dimmable High Power LED Direct AC Driver

For complete documentation, see the data sheet.

The FL77944 is a direct AC line LED driver with a minimal number of external RC passive components. In normal configuration, one resistor is to adjust LED power, and one capacitor is to provide a stable voltage to an internal biasing shunt regulator. The FL77944 provides phase-cut dimming with wide dimming range, smooth dimming control and good dimmer compatibility. It achieves high efficiency with high PF and low THD, which makes the FL77944 suitable for high-efficiency LED lighting systems. The FL77944 has a dedicated DIM pin which can be used with analog or digital PWM dimming. The FL77944 can also be used with a rheostat dimmer switch which is suitable for desktop or indoor lamps. Operation of FL77944 admits driving higher-wattage systems, such as street lights and down lights, by simply parallel connecting the driver ICs.

Features

• The simplest Direct AC LED Driver with Only Two External RC Passive Component
• Wide AC Input Range: 90~305 VAC
• Four Integrated High-Voltage LED Constant Current Sinks of up to 150 mA (RMS) Capability
• TRIAC Dimmable (Leading/Trailing Edge)
• Rheostat Dimmable
• Analog/Digital PWM Dimming Function
• High Power Factor (above 0.98 in normal configuration)
• Adjustable LED Power with an External Current Sense Resistor
• Low Harmonic Content (THD under 20% in normal configuration)
• Flexible LED Forward Voltage Configuration

For more features, see the data sheet.

Applications

• Lighting
• LED Lighting – High Power – Analog/PWM dimming
• LED Lighting – Low Power – Analog/PWM dimming
• LED Lighting – Mid Power – Analog/PWM dimming

For more information please contact your local sales support at www.onsemi.com.

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