

Product Overview

FL77904: Phase-cut Dimmable Compact LED Direct AC Driver

For complete documentation, see the data sheet.

The FL77904 is a direct AC line LED driver with a minimal number of external RC passive components. In normal configuration, one resistor adjusts LED current for desired system luminance and another bypass capacitor provides a stable voltage to an internal biasing shunt regulator. The FL77904 provides phase-cut dimming with wide dimming range, smooth dimming control and good dimmer compatibility. Optimized levels of each LED strings' current regulation achieve over 0.98 high PF and less than 20% low THD which makes the FL77904 suitable for high-efficiency LED lighting systems. The FL77904 can be also used with a simple rheostat dimmer switches which are suitable for desktop or indoor lamps. Flicker index is significantly improved by using proprietary self valley fill technique without degrading PF and THD. The cost effective solution brings low line ripple light quality with system compactness. Operation of FL77904 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 Components
- Wide AC Input Range: 90~305 VAC
- Four Integrated High-Voltage LED Constant Current Sinks of up to 75 mA RMS Input Current Capability
- High Power Factor (above 0.98 in normal configuration) Low Harmonic Content (THD under 20% in normal configuration)
- Low Flicker Index by Self Valley Fill with No Degradation of PF and THD
- Adjustable LED Power with an External Current Sense Resistor
- TRIAC Dimmable (Leading/Trailing Edge)
- Rheostat Dimmable Flexible LED Forward Voltage Configuration
- Power Scalability with Multiple Driver ICs
- Over-Temperature Protection (OTP)

For more features, see the data sheet

Applications

- LED Lighting – Mid Power – Non dimming
- LED Lighting – Mid Power – Phase-cut dimming
- LED Lighting – Low Power – Non dimming
- LED Lighting – Low Power – Phase-cut dimming

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

Created on: 11/30/2020