

Product Overview

FL77905: Analog / PWM / Phase-cut Dimmable Compact LED Direct AC Driver

For complete documentation, see the data sheet.

The FL77905 is a direct AC line LED driver with 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. It achieves high efficiency with high PF and low THD which makes the FL77905 suitable for high-efficiency LED lighting systems. The FL77905 can also be used with a rheostat dimmer switches which are suitable for desktop or indoor lamps. The FL77905 has a dedicated DIM pin which is designed to be used with analog or digital PWM dimming.

Features

- The simplest Direct AC LED Driver with Only Two External RC Passive Components
- Wide AC Input Range: 90~305 VAC
- Analog/PWM Dimming
- 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
- Rheostat Dimmable Flexible LED Forward Voltage Configuration
- Power Scalability with Multiple Driver ICs
- Over-Temperature Protection (OTP)

Applications

- LED Lighting – Mid Power- Analog/PWM dimming
- LED Lighting – Mid Power – Phase-cut dimming
- LED Lighting – Low Power – Phase-cut dimming

Part Electrical Specifications

Product	Compliance	Status	Topology	V _I Min (V)	V _I Max (V)	V _O Max (V)	I _O Max (mA)	f _{SW} Typ (kHz)	Package Type
FL77905MX	Pb-free Halide free	Active	Direct AC Driver	18	500	500	47/86/96 - I _{LED1/2/3}	Linear	SOIC8 N EP

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

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