NCL30001

LED Driver, High Efficiency, Single Stage, Power Factor Corrected

Product Overview

For complete documentation, see the data sheet.

The NCL30001 is a switch mode power supply controller intended for medium to high power single stage power factor (PF) corrected isolated flyback LED Drivers. It employs a Continuous Conduction Mode (CCM) control technique to ensure near unity power factor across a wide range of input voltages and output power.

Features

- Frequency Jittering
- Brown Out Detector
- High Accuracy Multiplier
- Voltage Feedforward
- Independent Latch-off input
- Adjustable Operating Frequency from 20-250 kHz
- Internal 160 msec Fault Timer
- Fixed Frequency Average Current Mode Control

Benefits

- Reduces EMI Signature
- Enhanced System Robustness
- Reduces Input Line Harmonics
- Improves Loop Response
- Facilitates Implementation of Overvoltage and Overtemperature Fault Protection

Applications

- LED Street Lighting
- Low Bay LED Lighting
- LED based Wall Packs and Wall Washers
- Elctronic Control Gear
- Power Factored High Power LED Drivers

End Products

- Power Supplies
- Power Adapters

Part Electrical Specifications

Product	Pricing ($/Unit)	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
NCL30001DR2G	1.05	Pb H	Active	Flyback	40	500	20 V_{GATE}	40/20 ns - Rise/Fall time	Up to 150	SOIC-16

Application Diagram