

Product Overview

NCL30161: Buck Regulator, Constant Current, for Driving High Power LEDs

For complete documentation, see the data sheet.

The NCL30161 is a hysteretic step-down, constant-current driver for high power LEDs. It is ideal for industrial and general lighting applications utilizing minimal external components.

The NCL30161 operates with an input voltage range from 6.3 V to 40 V. The hysteretic control gives good power supply rejection and fast response during load transients and PWM dimming to LED arrays of varying number and type.

A dedicated PWM input (DIM/EN) enables a wide range of pulsed dimming, and a high switching frequency allows the use of smaller external components minimizing space and cost. Protection features include resistor-programmed constant LED current, shorted LED protection, under-voltage and thermal shutdown. The NCL30161 is available in a DFN10 3 mm x 3 mm package.

Features

- Single Pin Brightness and Enable/Disable Control using PWM
- Adjustable LED Current
- Thermal Shutdown Protection

Benefits

- Enables a wide range of pulse dimming
- Hysteretic current control
- Circuit protection from thermal breakdown

Applications

- LED Driver
- Constant Current Source
- General Illumination
- Industrial Lighting

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
NCL30161MNTXG	Pb-free Halide free	Active	Step-Down	6.5	40	40	1	Up to 1400	DFN-10

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

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