

Application Note

Dimming the ULE28000

Introduction

The ULE28000 Series family of products was designed to deliver constant current to the LEDs so that the light output would be consistent even with variations in the input voltage within the operating range.

However, certain applications require the device to be dimmed.

Voltage-Current Characteristics

When the input voltage is varied in the operating range of 11.5V to 15.0V the current through the LEDs remain relatively constant with reference to the current at nominal 12.0V.

When the voltage goes below 11.5V the current decreases. It drops fairly linearly down to about 10.0V then cuts to zero as it approaches 8.0V.

Therefore, by controlling the input voltage in this range the light output of the device would vary achieving a dimming effect.

Dimming

The dimming effect of a 8.5W model is observed in the Fig.1 below. Models with lower wattages will exhibit the same behaviour.

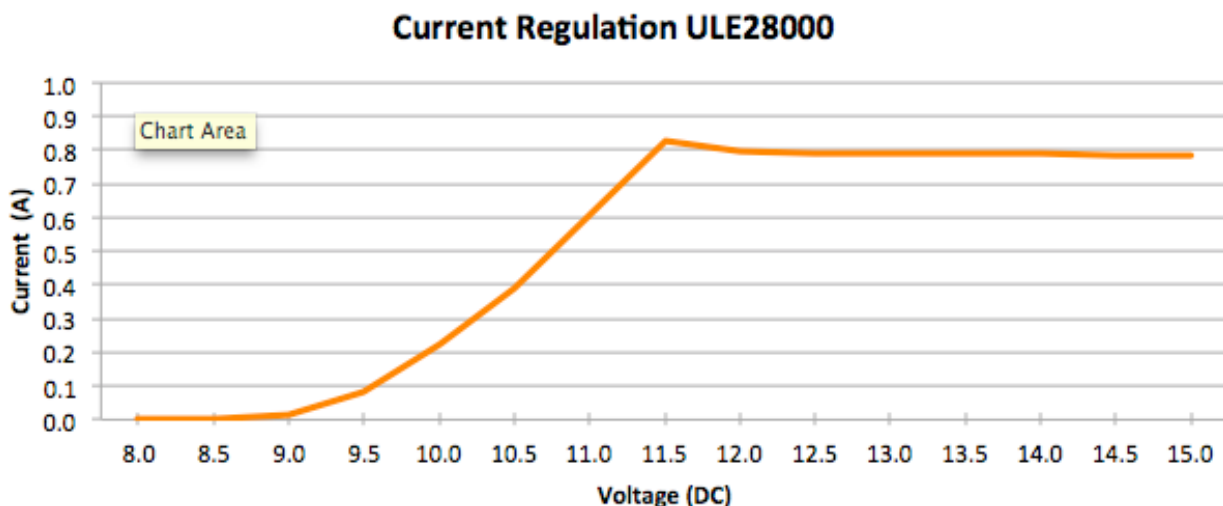


Fig. 1: Voltage-Current Characteristics of 8.5W ULE28000

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