



New Product Announcement

AL5822

Ripple-Current Suppressor Minimizes LED Light Flicker

The AL5822 is an adaptive linear-current controller targeted to suppress low-frequency LED current ripple.

When combined with single-stage constant-current high power factor LED drivers (AL1665), the device can provide a high power factor and low-ripple solution that meets commercial lighting's high performance requirements.

The AL5822 has a high efficiency driving mechanism that suppresses the LED current ripple without any sign of flickering and strobing.

The AL5822 has many built-in protection features, such as overtemperature protection (OTP), overcurrent protection (OCP), and LED short-circuit protection (SCP).

The AL5822 is available in the SOT26 package.



The Diodes Advantage

The AL5822 provides a simple, cost-effective controller solution for suppressing low-frequency LED current ripple (e.g. 100/120Hz) without using any magnetic inductive components.

- **Eliminates Low-Frequency Flickering and Maintains High PF**
Adjust the LED chain cathode voltage for voltage variation and maintain system power factor from pre-stage
- **Adopts Different LED String Voltage and Current**
Tunable LED current ripple ratio can be adjusted by external resistors, compensation capacitors, and external MOSFETs
- **Ripple Suppression for Whole Triac and PWM Dimming Range**
Closed-loop current ripple cancellation control technology can cover a full dimming range
- **Built-In Full-Protection Functions**
OTP/OCP/SCP makes commercial lighting solutions more reliable and robust

Applications

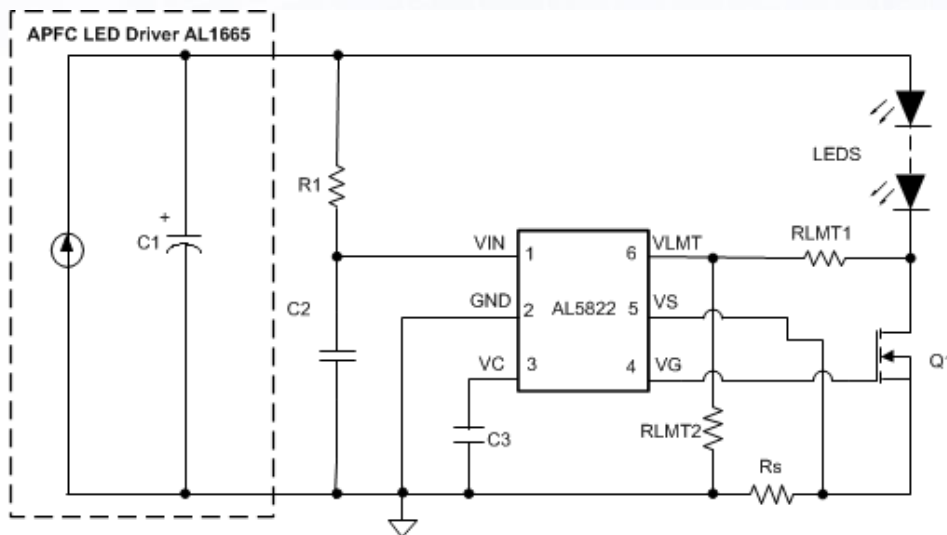
- Commercial LED Lighting
- Industrial LED Lighting



New Product Announcement

AL5822

Typical Application



High-Performance Solution For Commercial/Industrial Lighting

Diodes Off-Line LED Drivers

Part Number	Min. Input Voltage	Max Input Voltage	CS accuracy	Efficiency	Operating temp range	High Power Factor	Analog Dimming	PWM Dimmable	Topology	Package Outline	Comment
	V _{AC}	V _{AC}	%	%	°C						
AL5822W6-7	24	305	5	NA	-40 ~ +105	>0.9	NA	Y	Adaptive Linear	SOT26	Controller
AL1665S-13	85	305	1.5	>85	-40 ~ +105	>0.9	0.05-2.5V	Y	Fly-Back/Buck-Boost	SO-8	Controller

Ordering Information

Part Number	Package Code	Package	Tape and Reel	
			Quantity	Part Number Suffix
AL5822W6-7	W6	SOT26	3,000/Tape & Reel	-7
AL1665S-13	S	SO8	4,000/Tape & Reel	-13

For more information: <https://www.diodes.com/part/AL5822>