



LED Linear Configurable Driver-Controller

The AL5814/17 is a dimmable and adjustable linear LED driver-controller offering excellent temperature stability with 4% reference voltage tolerance over a wide input voltage range from 4.5V to 60V.

AL5817 has an enable bar pin ENB available to disable the device and external transistor drive.

AL5814 has a SFAULT pin allowed to set V_{CC} enable level for LED-Open protection.

The AL5814/17 can drive external Bipolar transistors or MOSFETs. LED-open detection feature through its VFAULT pin, which turn off the external transistors also allows PWM dimming signal applied on VFAULT.

It is available in the thermally enhanced MSOP-8EP package.



The Diodes Advantage

- **Drive external BJT or MOSFET with maximum driving current up to 15mA**
Supports high current and high power Linear LED applications
- **Input voltage range from 4.5V to 60V**
Supports wide input voltage range
- **Can be dimmed by external analog and PWM signal on VFAULT**
Is flexible when using the dimming functions
- **Robust protections of output open protection, input under voltage lock-out and over temperature protection.**
Reliable system performance
- **V_{CC} enable level setting for LED-Open protection activation. (AL5814)**
Is flexible to activate the LED-Open detection at certain input voltage
- **Configurable LED Current Setting**
LED current can be configured by NTC and resistor divider between REF and VSET pin

Applications

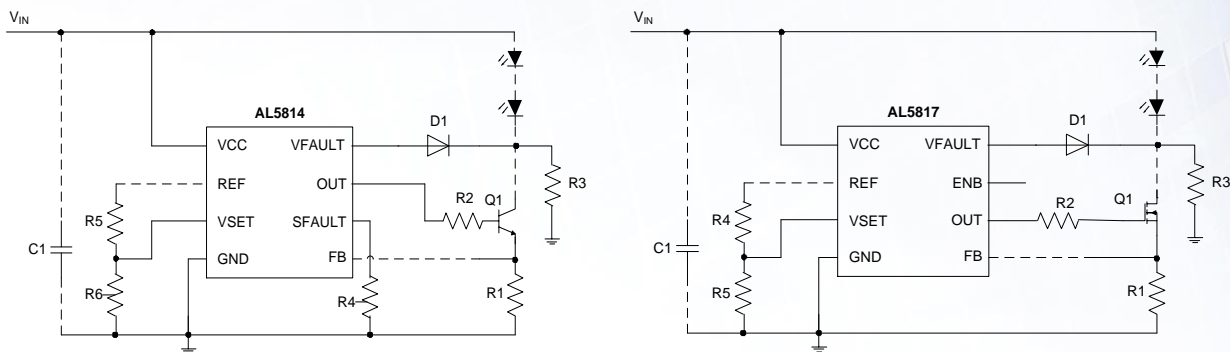
- Appliances LED Lighting
- Instrumentation Illumination
- Connected Lighting



New Product Announcement

AL5814/17

Typical Application Circuit



Product Portfolio

Part Number	Min. Input Voltage	Max. Input Voltage	Max. Out Current	Reference voltage accuracy	Efficiency	Ambient Temperature Range	Package Outline	Feature
	V	V	mA	+/- %	%	°C		
AL5814	4.5	60	15	4	>80	-40~ +105	MSOP-8EP	PWM Dimming
AL5815	4.5	60	15	4	>80	-40~ +105	SOT25	PWM Dimming
AL5816	4.5	60	15	4	>80	-40~ +105	SOT25	Low Standby Mode
AL5817	4.5	60	15	4	>80	-40~ +105	MSOP-8EP	Low Standby Mode

To find out more information: <https://www.diodes.com/products/power-management/led-drivers/linear-led-drivers/>
 AL5814: <https://www.diodes.com/part/AL5814>
 AL5817: <https://www.diodes.com/part/AL5817>

Ordering Information

Part Number	Package Code	Package	Tape and Reel	
			Quantity	Part Number Suffix
AL5814MP-13	MP	MSOP-8EP	2,500/Tape & Reel	-13
AL5817MP-13	MP	MSOP-8EP	2,500/Tape & Reel	-13