



# New Product Announcement

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## AL5815/16

# 60V LED Dimmable Linear Controller

AL5815 and AL5816 are adjustable constant current LED linear controllers offering excellent temperature stability and current capability. They can work with a wide input voltage range from 4.5V to 60V. With its low 200mV current sense FB voltage, it controls the regulation of LED current with minimum power dissipation compared with traditional linear LED drivers. This makes it ideal for medium to high current LEDs.

The device has an internal output drive up to 15mA, which enables it to drive external Bipolar transistors or MOSFETs.

The AL5815 has an enable (ENB) pin. ENB low enables the device; ENB high puts the device into a low quiescent current shutdown state.

If high speed dimming is required the AL5816 has a PWM pin. This device can run at frequencies greater than 20kHz.

AL5815 and AL5816 are available in the SOT25 package.



## The Diodes Advantage

**The AL5815/AL5816 provide accurate current control for driving output current up to 1A for Linear LED driver applications.**

- **Wide input voltage range from 4.5V to 60V**  
Meets low and medium voltage requirements
- **15mA driving capability for OUT pin**  
Supports up to 1A output current applications
- **200mV FB voltage**  
High accuracy and low power consumption for sense resistor

## Applications

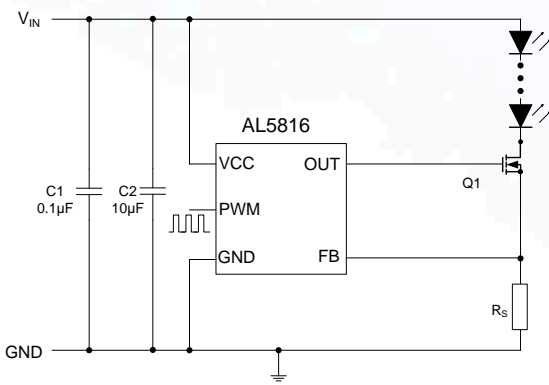
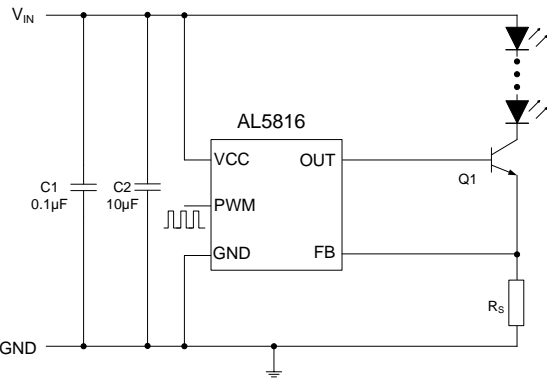
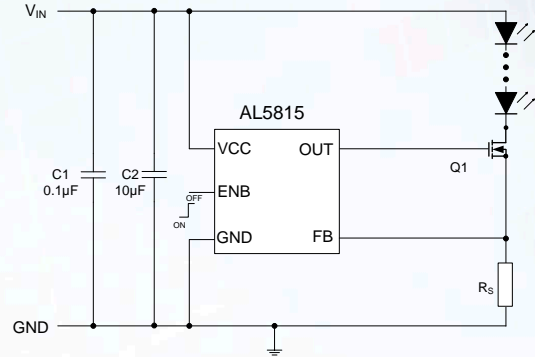
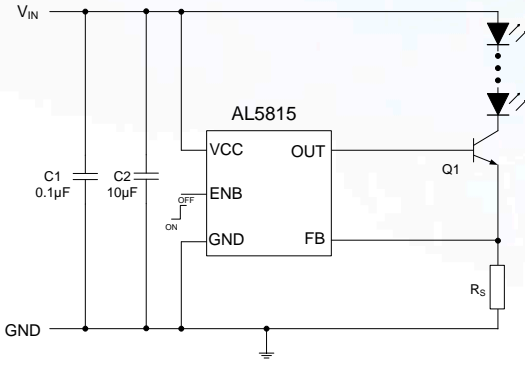
- Commercial and Industrial Lighting
- Exterior Lighting
- Appliance Lights



# New Product Announcement

## AL5815/6

### Circuit Diagram



### Product Portfolio

Part Number	Product Description	Min. Input Voltage	Max. Input Voltage	Max. Output Voltage	Max. Output Current	LED Current Accuracy	Switching Frequency	Dimming Method		Efficiency	Sense Voltage (mV)	Package Outline
								Analog	PWM			
AL5815W5-7	60V LED Linear Controller	4.5	60	-	-	3	-	N	Y	>80	200	SOT25
AL5816W6-7	60V LED Linear Controller	4.5	60	-	-	3	-	N	Y	>80	200	SOT25

### Ordering Information

Device	Packaging	Marking ID	13" Tape and Reel	
			Quantity	Part Number Suffix
AL5815W5-7	SOT25	BF	3,000	-7
AL5816W6-7	SOT25	BJ	3,000	-7