



New Product Announcement

AL1672

Single Stage Dimmable Buck Converter with 600V/4A MOSFET

The AL1672 is a high-performance single stage Buck converter, targeting dimmable LED lighting applications. It operates at BCM mode which results in good EMI and efficiency.

The AL1672 can support multiple dimming modes. When a 0.3~2.4V DC signal is applied on APWM pin, the device will operate in analog dimming mode. When a digital signal is applied on APWM pin, the device works at PWM dimming mode.

The AL1672 features low start-up current and low operation current. It integrates multiple protections including overvoltage, short circuit, overcurrent and over-temperature protection. It also integrates 600V/4A high voltage MOSFET.

The AL1672 is available in SO-8EP package.



The Diodes Advantage

The AL1672 is a high-performance single stage Buck converter with built-in MOSFET for PWM/Analog dimming applications.

- **Highly integrated converter in SO-8EP package**
Low BOM cost solution
- **Built-in 4A/600V MOSFET**
Small size and simple circuit design
- **Supports both PWM and Analog dimming**
Can be dimmed by a PWM signal or a DC voltage
- **SO-8EP Package**
Better thermal performance
- **High PF and low THD**
PF > 0.9, THD < 20%
- **Built-in Undervoltage Lock-out, Output Open-Circuit Protection, Output Overvoltage Protection, Output Short-Circuit Protection, Thermal Foldback Protection and Over-Temperature Shutdown**
Provides a complete protection function

Circuit Functions

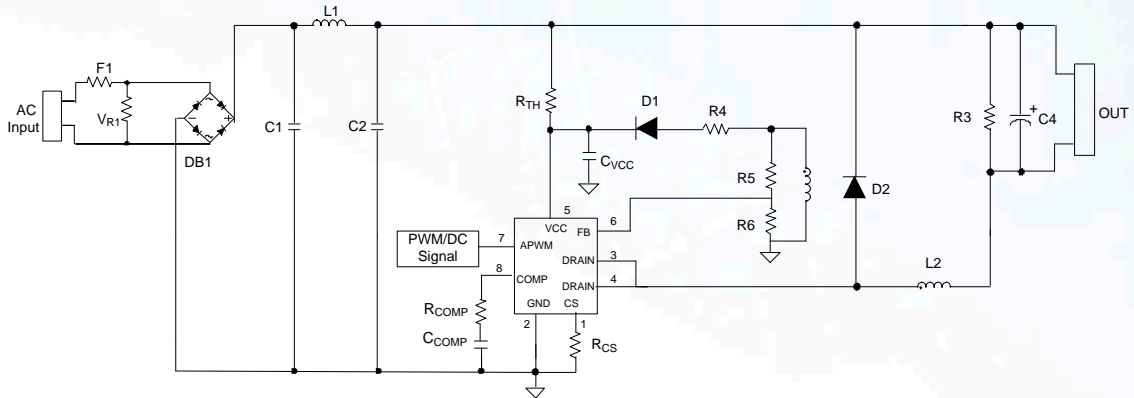
- General LED Lighting Driver with Dimming Function
- General Purpose Constant Current Source
- Smart LED Lighting



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Application Circuit



Product Portfolio

Part Number	Topology			Min. Input Voltage	Max. Input Voltage	Max. Output Voltage	Max. Output Current	LED Current Accuracy	Switching Frequency	Dimming Method		Efficiency	Sense Voltage	Power Factor	Package Outline
	Flyback	Buck-boost	Output							Analog	PWM				
	V _(RMS)	V _(RMS)	V							mA	+/- %		kHz		
AL1672	Y	Y	600V NMOS	85	265	-	-	5	<150	Y	Y	>85	300	>0.9	SO-8EP
AL1673	Y	Y	600V NMOS	85	265	-	-	5	<150	Y	Y	>85	300	>0.9	SO-8EP
AL1663	Y	Y	Control-ler	85	265	-	-	5	<150	Y	Y	>85	300	>0.9	SO-8

Ordering Information

Device	Packaging	Marking ID	13" Tape and Reel	
			Quantity	Part Number Suffix
AL1672-40CSP-13	SO-8EP	1672-40C	2,500	-13