

Product Summary Sheet

Integrated LED Driver with Average-Mode Current Control

Applications:

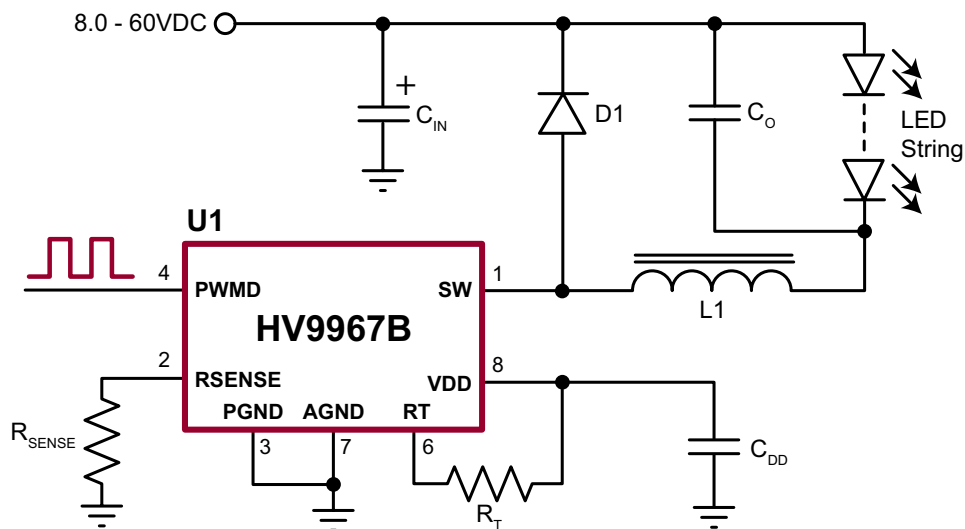
- ▶ DC/DC or AC/DC LED drivers
- ▶ RGB backlighting drivers for flat panel displays
- ▶ General purpose constant current source
- ▶ Signage and decorative LED lighting
- ▶ Chargers



8-Lead DFN (K7)



8-Lead MSOP (MG)



Typical Application Circuit

Product Overview:

The HV9967B is an average-mode current control LED driver IC operating in a constant off-time mode.

The IC features an integrated 60V, 0.8Ω MOSFET that can be used as a stand-alone buck converter switch, or connected as a source driver for driving an external high-voltage depletion-mode MOSFET. The HV9967B is powered through its switching output when the integrated switch is off. Hence, the same external MOSFET can be used as a high-voltage linear regulator for powering the IC.

The LED current is programmed with one external resistor. The average-mode current control method does not produce a peak-to-average error, and therefore greatly improves current accuracy and line and load regulation of the LED current without any need for loop compensation or direct sensing of the LED current at a high-voltage potential. The auto-zero circuit cancels the effects of the input offset voltage and of the propagation delay of the current sense comparator.

Features:	Benefits:
Average-mode, constant current control	Improved current accuracy (+/-3%) without need for loop compensation and high-side current sensing
Cascode connection with a 500V depletion-mode MOSFET (Supertex DN2450)	Enables operation from AC mains
Compact 8-Lead MSOP and 8-Lead DFN packages	Conserves board space
Integrated 60V, 0.8Ω MOSFET	Reduced component count in solid-state lighting designs



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Ordering Information / Availability

Part Number	Package Option	Samples	Lead Time
HV9967BK7-G	8-Lead DFN (Green)	Contact Factory	10-12 Weeks ARO
HV9967BMG-G	8-Lead MSOP (Green)	Now	4-6 Weeks ARO

-G indicates the part is RoHS compliant (Green).



Product Contact

For any questions regarding the HV9967B, please contact your local area Supertex sales office, or contact the main office in the US at:

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