

LED Driver 1500uA Supply Current 8-Pin DFN EP T/R

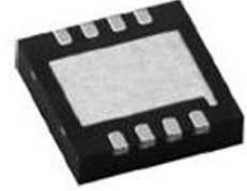
Manufacturer: [Microchip Technology, Inc](#)

Package/Case: WDFN-8

Product Type: Optoelectronics

RoHS: RoHS Compliant/Lead free 

Lifecycle: Active



Images are for reference only

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General Description

The HV9918 is a PWM controller IC designed to drive high brightness LEDs using a buck topology. It operates from an input voltage of 4.5 to 40VDC and employs hysteretic control with a high-side current sense resistor to set the constant output current up to 700mA. The device is well suited for applications requiring a wide input voltage range. The high-side current sensing and an integrated current-setting circuitry minimize the number of external components while delivering an accurate average output. Dedicated pulse-width modulation (PWM) input enables pulsed LED dimming over a wide range of brightness levels. A hysteretic control method ensures excellent input supply rejection and fast response during load transients and PWM dimming. The HV9918 offers an analog-controlled PWM dimming feature that reduces the output current by applying an external DC voltage below the internal 2.0V threshold voltage from ADIM to GND. ADIM can also accept input from a resistor divider including a negative temperature coefficient (NTC) thermistor connected between ADIM and GND, or a positive temperature coefficient (PTC) thermistor connected between ADIM and VDD thus providing a PWM thermal-foldback feature that reduces the LED current when the temperature of the LED string exceeds a specified temperature point. Additional features include thermal-shutdown protection. The high switching frequency up to 2.0MHz permits the use of small inductors and capacitors, minimizing space and cost in the overall system. The HV9918 comes in a small 8-Lead DFN package and is ideal for industrial and general lighting applications.

Key Features

Hysteretic control with high-side current sensing

Integrated 40V 1.0Ω MOSFET

Wide input voltage range: 4.5 to 40V

Up to 2.0MHz switching frequency

Adjustable constant LED current

Analog or PWM control signal for PWM dimming

Over-temperature protection

Recommended For You

HV7224PG

Microchip Technology, Inc
QFP

HV9910CLG-G

Microchip Technology, Inc
SOP8

HV9921N3-G

Microchip Technology, Inc
TO-92

HV816K6-G

Microchip Technology, Inc
QFN

HV857MG-G

Microchip Technology, Inc
MSOP8

HV9923N8-G

Microchip Technology, Inc
SOT89

HV5812P

Microchip Technology, Inc
PLCC28

HV9925SG-G

Microchip Technology, Inc
SOIC

HV9922N3-G

Microchip Technology, Inc
TO-92

HV823LG-G

Microchip Technology, Inc
SOP8

HV9919BK7-G

Microchip Technology, Inc
8WDFN3x3x0.

HV5812WG-G

Microchip Technology, Inc
28SOIC

HV9922N8-G

Microchip Technology, Inc
SOT89

HV6810WG

Microchip Technology, Inc
SOP20

HV857LMG-G

Microchip Technology, Inc
MSOP8