



## Features

- Universal AC input from 80V<sub>AC</sub> to 265V<sub>AC</sub>
- Efficiency > 90% @ V<sub>AC</sub> = 110V, 350mA, 6-LEDs
- Setting current accuracy within ±5%
- To drive external MOSFET current up to 3 Amperes
- Hysteretic PFM improves efficiency at light loading
- Full protection: Thermal/UVLO/OVP/LED Open-/Short- Circuit
- Available in package: MSOP-8L

### Mini Small Outline Package



GMS: MSOP-8L-118mil

## Product Description

The MBI6901 is a high efficiency and step-down AC/DC controller which is designed to deliver constant current. The MBI6901 accepts universal input from 80V<sub>AC</sub> to 265V<sub>AC</sub>. It is specifically designed with hysteretic PFM control scheme to enhance the efficiency at light loading. The MBI6901 regulates the output current within ±5% preset current by well controlling the external MOSFET. In addition, LED current dimming can be controlled via output of photo coupler through DIM pin. The MBI6901 also has multiple features to protect the controller from fault conditions, including under voltage lockout (UVLO) and over voltage protection (OVP). Additionally, to ensure the system reliability, the MBI6901 is built with the thermal protection (TP) function. The function protects IC from over temperature (155°C) by turning off the external MOSFET. As soon as the temperature is below 125°C, the external MOSFET will resume to work again. The MBI6901 is available in MSOP-8L package.

## Applications

- T-8 CFL Replacement LED Solution
- General Illumination
- Power Supply for Light Panel