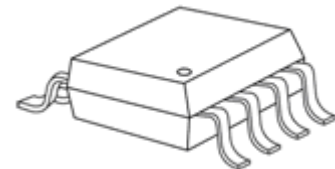




Features

- Efficiency > 85% when $V_{AC} = 110V$, $I_{LED} = 100mA$, $V_{LED} = 80V$
- PWM switching control
- Operation with active power factor correction
- THD < 15% when $V_{AC} = 110V$, $I_{LED} = 100mA$, $V_{LED} = 80V$
- Full protections: OTP/UVLO/OVP/OCP/LED open-/short-circuit
- Current setting accuracy within $\pm 5\%$
- Full range line regulation within 1.7%
- Available in SOP-8L package

Small Outline Package

**GD: SOP8L-150-1.27**

Product Description

MBI6903 is a high efficiency buck-boost AC/DC controller designed to deliver constant current output. The input voltage range of MBI6903 application is universal from 85VAC to 265VAC. It is featured by a PWM control scheme. MBI6903 is designed to operate with active power factor correction (PFC) circuit and is therefore capable of maintaining system power factor greater than 0.9 with proper design. MBI6903 regulates the output current within $\pm 5\%$ of the preset current by well controlling the external MOSFET. MBI6903 also protects the controller from fault conditions, inclusive of under voltage lock-out (UVLO), over voltage protection (OVP) and over current protection (OCP). To ensure the system reliability, over temperature protection (OTP) is built-in to prevent IC from over temperature ($155^{\circ}C$) by turning off the external MOSFET. Once the temperature drops below $125^{\circ}C$, the external MOSFET will resume working. MBI6903 is available in SOP-8L package.

Applications

- T-8 CFL Replacement LED Solution
- E26/E27 Light Bulb Alternative LED Solution
- Flat Panel Lighting Solution
- General Illuminations