



HIGH-EFFICIENCY LED DRIVER / AEC-Q100 - MPM6010 - 36V/1.5A



The **MPM6010** 36 V/1.5 A high-efficiency module is a synchronous, rectified, step-down, LED driver with built-in power MOSFETs, inductor, and two capacitors. The MPM6010 offers a very compact solution with only four external components to achieve 1.5A of continuous output current with excellent load and line regulation over a wide input supply range. The MPM6010 uses synchronous mode operation to achieve high efficiency.

The MPM6010 eliminates design and manufacturing risks while improving the time to market dramatically.

Full protection features include over-current protection (OCP) and thermal shutdown.

The MPM6010 is available in a space-saving QFN-17 (3 mm \times 5 mm \times 1.6 mm) package.

FEATURES

- Complete Switch Mode Power Supply
- Wide 4 V to 36 V Operating Input Range
- Integrated 2.2 µH Power Inductor (AEC-Q200 Component)
- $85 \text{ m}\Omega/50 \text{ m}\Omega$ Low RDS(ON) Internal Power MOSFETs
- Wide PWM Dimming 100Hz 2kHz Fault Indication for LED Short, Open, and Thermal Shutdown
- Over-Current Protection (OCP) with Valley Current Detection
- Available in a Wettable Flank Package
- Package QFN-17 (3 mm \times 5 mm \times 1.6 mm)

APPLICATIONS

• Automotive LED Lighting





