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Product Specifications of the μ PD168891 Control IC

[Basic Characteristics]

- Single-channel boost type constant current output control with dimming control function employing PWM signal
- Power supply voltage: 6 V to 18 V
- LED output current: 0.35 A to 0.7 A (external MOSFET)
- Package: 48-pin VQFN (7 mm × 7 mm)

[Protection Functions]

- LED /power MOSFET (external) overcurrent protection: Shutdown after overcurrent detection
- Over voltage/load open protection: Shutdown after detection
- LED short to supply/ground protection: Shutdown after detection
- Overheat protection: Shutdown after detection
- Low power supply voltage protection: Suppression of LED current, shutdown when 6 V or less, re-illumination at power supply voltage recovery
- High power supply voltage protection: Shutdown (adaptable to various voltage/duration conditions), re-illumination at power supply voltage recovery
- LED short circuit detection: Voltage rise/drop when LED short circuit is detected, and shutdown occurs.

In case of malfunction (triggering of a protection function), the external MOSFET is controlled to shut off the current path.

[Other Functions]

- Diagnostic function: Output signal to indicate the fault state in case of malfunction (triggering of a protection function)
- Low EMI noise