

1A Adjustable Voltage High Speed LDO Regulators ME6118 Series

General Description

The ME6118 series are highly accurate, low noise, LDO Voltage Regulators that are capable of providing an output current that is in excess of 1A with a maximum dropout voltage of 1.3V at 1A (ME6118A33). This series contains four fixed output voltages of 1.2V, 1.8V, 2.5V and 3.3V that have no minimum load requirement to maintain regulation. On chip trimming adjusts the reference/output voltage to within $\pm 2\%$ accuracy. Internal protection features consist of output current limiting, safe operating area compensation, and thermal shutdown. The ME6118 series can operate with up to 18V input.

Features

- Output Current in Excess of 1A
- Dropout Voltage: 80mV @ $I_{OUT} = 100\text{mA}$ (ME6118A33)
- Operating Voltage Range: 2.5V ~ 18V
- Highly Accuracy: $\pm 2\%$
- Adjustable Output Voltage Option
- Standby Current: 52uA (TYP.)
- High Ripple Rejection: 70dB @ 1KHz (ME6118A33)
- Line Regulation: 2mV (TYP.)
- Temperature Stability $\leq 0.5\%$
- Thermal Shutdown Protection: 160°C

Typical Application

- Consumer and Industrial Equipment Point of Regulation
- Switching Power Supply Post Regulation
- Hard Drive Controllers
- Battery Chargers

Package

- 3-pin SOT223, SOT23-3, SOT89-3, TO252-2L

Typical Application Circuit

