

1.0A Adjustable Voltage High Speed LDO Regulators ME1117 Series

General Description

ME1117 series are highly accurate, low noise, LDO Voltage Regulators that are capable of providing an output current that is in excess of 1.0 A with a maximum dropout voltage of 1.3 V at 1.0A. This series contains six fixed output voltages of 1.2 V, 1.5V, 1.8 V, 2.5 V, 3.3 V, and 5.0 V that have no minimum load requirement to maintain regulation. Also included is an adjustable output version that can be programmed from 1.25 V to 20 V with two external resistors. On chip trimming adjusts the reference/output voltage to within $\pm 2.0\%$ accuracy. Internal protection features consist of output current limiting, safe operating area compensation, and thermal shutdown. The ME1117 series can operate with up to 20 V input.

Typical Application

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

Features

- Output Current in Excess of 1.0A
- Dropout Voltage: 1.07V@ $I_{OUT} = 100\text{mA}$
- Operating Voltage Range:
4.8V~20V (ME1117A33)
- Highly Accuracy: $\pm 2\%$
- Adjustable Output Voltage Option
- Standby Current: 3mA (TPY.)
- High Ripple Rejection: 60dB@1KHz
(ME1117A33)
- Line Regulation: 0.1% (TYP.)
- Temperature Stability $\leq 0.5\%$
- Current Limit (1.3A)
- Thermal Shutdown Protection (160°C)

Package

- 3-pin SOT223、TO252-2