AME

AME8902A

5.5V 1A, High PSRR, Low Output Noise, Ultra-Low Dropout Voltage Regulator

■ General Description

The AME8902A device is a CMOS-based positive voltage regulator featuring 1A that provides high ripple rejection, low dropout voltage, high output voltage accuracy and low supply current. Internally, it consists of voltage reference unit, an error amplifier, a resistor-net for output voltage setting, a current limit circuit, a thermal shutdown circuit and reverse current protection circuit.

AME8902A is available in the DFN-6D(2x2x0.75mm) & DFN-8C(3x3x0.75mm) packages.

■ Features

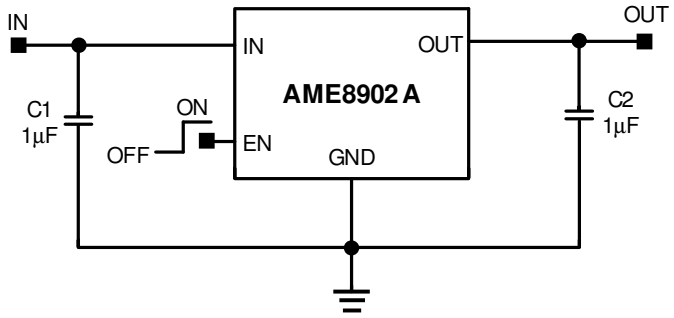
- 1.32V to 5.5V Wide Input Voltage Range
- Output Voltage Range:
  Fixed Version_from 0.9V to 4.3V
  ADJ Version_from 0.85V to 5.0V
- Output Voltage Tolerance: ±1%
- Dropout Voltage: 156mV @1A
- Maximum Output Current: 1A
- High PSRR: 80dB @1kHz
- Output Noise: 10μVrms
- Shutdown Current: 0.1μA (typical)
- Internal Over Temperature Protection
- Internal Over Current Protection
- Built-in Soft-Start and Inrush Current Limit
- Fast Auto Discharge Function for Power Down

■ Applications

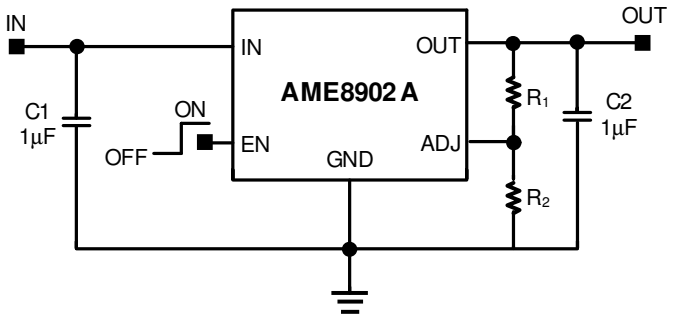
- Portable Device, Tablet and Smartphone
- Camera, VCR and Car Dashboard Camera
- Low Light and Low Noise Cam Application
- Communications and Infrastructure
- AR and VR Application
- Motors and Lightings that are accompanied by Self-Heating
- FA Equipment, Smart Meter
- Vending Machines that are used under High Temperature Conditions

■ Typical Applications

A. Fixed Mode



B. ADJ Mode



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