General Description

The SLD609S a low noise, high PSRR, fast transient response, and low dropout voltage linear regulator which is designed using C_{MOS} technology. It provides 500mA output current capability. The operating input voltage range is from 2.7V to 20V. The adjustable output voltage range is from 1.2V to (V_{IN} - V_{DROP}).

Other features include logic-controlled shutdown mode, short-circuit current limit and thermal shutdown protection. The SLD609S has automatic discharge function to quickly discharge V_{OUT} in the disabled status.

The SLD609S is available in Green SOT23-5 packages. It operates over an operating temperature range of -40°C to +125°C.

Features

- Input voltage range: 2.7V ~ 20V
- Fixed VOUT: 1.2V/1.5V/1.8V/2.5V/2.8V/3V/3.3V/3.8V/4.2V and 5.0V in different version
- Adjustable Output from 1.2V to (V_{IN} - V_{DROP})
- Output accuracy: ±1% for all version and temperature range
- High PSRR: 100 dB (TYP) @ 1Khz
- Low noise: 14μVRMS (TYP) @ 10Hz~100Khz
- Low Quiescent current: 39μA (TYP)
- Shutdown Supply Current: 1.2μA (TYP)
- Over Current protection
- Output Discharge
- Thermal Shutdown
- -40°C to +125°C Operating Temperature Range
- Excellent Load and Line Transient Responses
- Robust ESD immunity capability
  HBM > ±2KV
  CDM > ±1KV
- Available in Green SOT23-5 Packages

Applications

- Instrumentation
- Precision ADC and DAC
- Precision Amplifiers in Industrial Equipment
- Low Noise VCO
- RF System
- Medical Equipment