



General Description

The SLD409S is a low V_{IN} , ultra-low noise, high PSRR and low dropout voltage linear regulator. It is capable of supplying 300mA output current with typical dropout voltage of only 72mV. The operating input voltage range is from 1.2V to 5.5V. The fixed output voltage range is from 1.2V to 3.3V and adjustable output voltage range is from 0.793V to 5.0V.

Other features include logic-controlled shutdown mode, short-circuit current limit and thermal shutdown protection. The SLD409S has automatic discharge function to quickly discharge V_{OUT} in the disabled status.

The SLD409S is suitable for applications which need low noise and fast transient response power supply, such as power supply of camera module in smart phone, etc.

The SLD409S is available in Green SOT23-5 packages. It operates over an operating temperature range of -40°C to $+125^{\circ}\text{C}$.

Features

- Input voltage range: 1.2V ~ 5.5V
- Fixed V_{OUT} : 1.2V/1.5V/1.8V/2.5V/2.8V/3V/3.3V/ in different version
- Adjustable Output from 0.793V to 5V
- Output accuracy: $\pm 1\%$ for all version and temperature range
- High PSRR: 92 dB (TYP) @ 1Khz
- Low noise: $6\mu\text{VRMS}$ (TYP) @ 10Hz~100Khz
- Low Quiescent current: 13 μA (TYP)
- Shutdown Supply Current: 0.03 μA (TYP)
- Over Current protection
- Output Discharge
- Thermal Shutdown
- -40°C to $+125^{\circ}\text{C}$ Operating Temperature Range
- Excellent Load and Line Transient Responses
- Robust ESD immunity capability
HBM > $\pm 2\text{KV}$
CDM > $\pm 1\text{KV}$
- Available in Green SOT23-5 Packages

Applications

- Camera Power
- Wireless device Power
- Smartphone, Wearable device
- Noise sensitive device Power