

CNS758xx

(FAST-TRANSIENT RESPONSE, 3A, LOW-DROPOUT VOLTAGE REGULATORS)

1 FEATURES

- 3A Low-Dropout Voltage Regulator
- Available in 1.5V, 1.8V, 2.5V, and 3.3V Fixed-Output and Adjustable Versions
- Low 125 μ A Typical Quiescent Current
- Fast Transient Response
- 3% Tolerance Over Specified Conditions for Fixed- Output Versions
- Thermal Shutdown Protection

2 DESCRIPTION

The CNS758xx family of 3A low dropout (LDO) regulators contains four fixed voltage option regulators and an adjustable voltage option regulator. These devices are capable of supplying 3A of output current with a dropout of 150mV (CNS75833). Therefore, the device is capable of performing a 3.3V to 2.5V conversion

Quiescent current is 125 μ A at full load and drops to less than 1 μ A when the device is disabled. The CNS758xx is designed to have fast transient load current changes.

The device is enabled when EN (enable) is voltage level ($> 2V$). Applying a low voltage level ($< 0.7V$) to EN shuts down the regulator, reducing the quiescent current to less than 1 μ A at $T_J = +25^{\circ}C$.