



# LC1213

## 250mA Low Consumption Linear Regulator

### DESCRIPTION

LC1213 series is a group of positive voltage output, low power consumption, low dropout voltage, three terminal regulator. It can provide 200mA output current when input / output voltage differential drops to 418mV ( $V_{out}=3.3V$ ), And it also provides foldback short-circuit protection and output current limit function. The very low power consumption of LC1213 ( $I_q=3\mu A$ ) can greatly improve natural life of batteries.

LC1213 can provide output value in the range of 1.2V~5.0V in 0.1V steps. It also can customized on command.

LC1213 includes high accuracy voltage reference, error amplifier, current limit circuit and output driver module.

LC1213 has well load transient response and good temperature characteristic, And it uses trimming technique to guarantee output voltage accuracy within  $\pm 2\%$ .

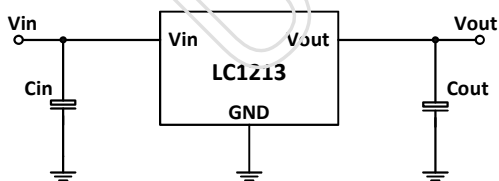
### FEATURES

- Low Power Consumption:  $3\mu A$ (Typ.)
- Maximum Output Current: 250mA
- Small Dropout Voltage
  - 211mV@100mA ( $V_{out}=3.3V$ )
  - 418mV@200mA ( $V_{out}=3.3V$ )
- Input Voltage Range: 2.5V~16V
- Output Voltage Range: 1.2V~5.0V (customized on command in 0.1V steps)
- Highly Accurate:  $\pm 2\%$  ( $\pm 1\%$  customized)
- Output Current Limit: 500mA
- Foldback Short-circuit Current: 85mA

### APPLICATIONS

- Battery Powered equipment
- Power Management of MP3、PDA、DSC、Mouse、PS2 Games
- Reference Voltage Source Regulation after Switching Power

### TYPICAL APPLICATION



**NOTE:** Input capacitor ( $C_{in}=1\mu F$ ) and Output capacitor ( $C_{out}=1\mu F$ ) are recommended in all application circuit. Ceramic capacitor is recommended.

### ELECTRICAL CHARACTERISTICS

#### Load Regulation

