Description

The YB1253 is a series of ultra-low-noise, high PSRR, and low quiescent current low dropout (LDO) linear regulators with 2.0% output voltage accuracy. The YB1253 regulators achieve a low 300mA dropout at 300mA load current of 3.6V output and are available in voltages ranging from 1.2V to 3.6V with 0.1 V per step (custom voltage is considerate at request).

The YB1253 regulators are optimized to work with low-ESR and low cost ceramic capacitors, reducing the amount of board space critical in portable devices. The YB1253 requires only 1.0μF output capacitor for stability with any load and consumes less than 1μA in shutdown mode.

Built-in thermal shutdown and short-circuit current limit offer secure protection against fault operation. YB1253 regulators also include an auto-discharge function. The YB1253 regulators are available in SOT-23 / SOT-25 / SOT-89 packages.

Features

- High Accuracy Output Voltage : ± 2%
- Wide Output Voltage Range : 1.2~3.6V
- Ultra-Low-Noise Low-Drop-Out
- Typical Output Current : 300 mA
- Low Quiescent Current: ~10μA
- 300mV Dropout at 300mA 3.6V Output
- Stable with 1.0μF Ceramic Capacitor
- Only Need Input and Output Capacitors
- Thermal Protection Shutdown
- Auto discharge function
- Green Package (RoHS) Available

Applications

- PDA, Notebook, PC Computers
- DSC, Cellular phones
- PCMCIA Cards, PC Cameras
- USB Based Portable Devices
- GSM/GPRS/3G RF Transceiver
- Wireless LANs
- Bluetooth Portable Radios
- Battery-Powered Devices

Typical Application Circuitry

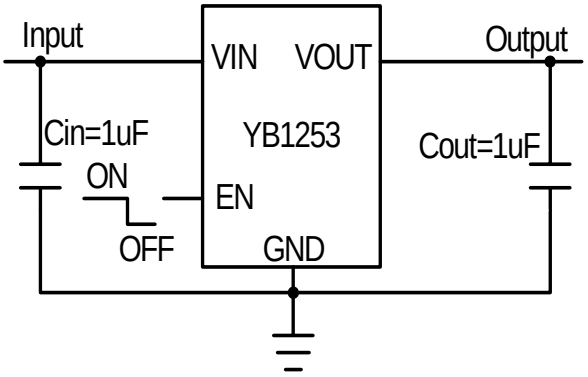


Figure 1-1 : SOT-25 application circuit

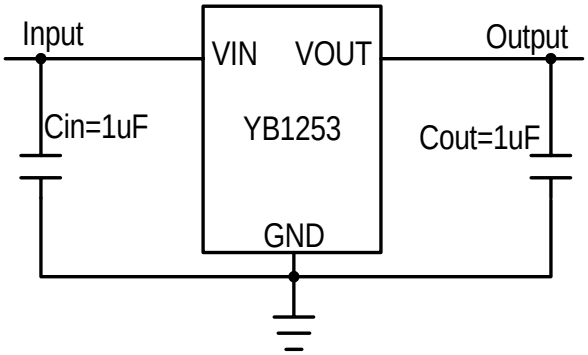


Figure 1-2 : SOT-23 application circuit