

PRELIMINARY SPECIFICATIONS SUBJECT TO CHANGE

DESCRIPTION

The MP2184 is a monolithic, step-down, switch-mode converter with built-in internal power MOSFETs. It achieves 4A continuous output current from a 2.5V-to-5.5V input voltage with excellent load and line regulation. The output voltage can be regulated to as low as 0.6V.

The Constant-On-Time control scheme provides fast transient response and eases loop stabilization. Fault protections include cycle-by-cycle current limiting and thermal shutdown.

The MP2184 is available in an ultra-small SOT583 package and requires a minimal number of readily available standard external components.

The MP2184 is ideal for a wide range of applications including high performance DSPs, wireless power, portable and mobile devices, and other low-power systems.

FEATURES

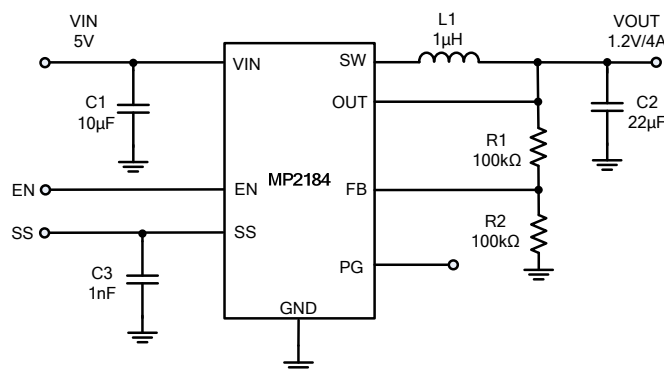
- Low I_Q : 21 μ A
- 1.2MHz Switching Frequency
- EN for Power Sequencing
- 1% FB Accuracy
- Wide 2.5V-to-5.5V Operating Input Range
- Output Adjustable from 0.6V
- Up to 4A Output Current
- 65m Ω and 35m Ω Internal Power MOSFET Switches
- 100% Duty On
- Output Discharge
- V_O OVP
- External Soft Start/Stop Control
- Short-Circuit Protection with Hiccup Mode
- Power Good
- Available in a SOT583 Package

APPLICATIONS

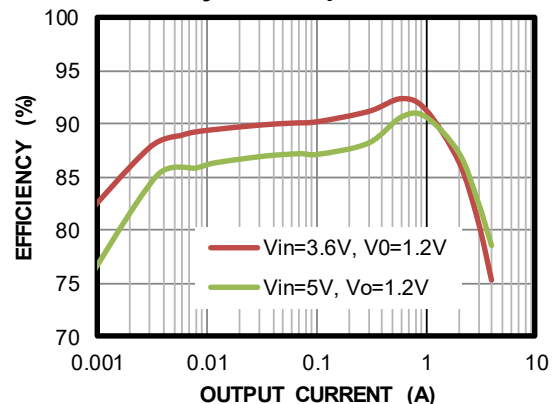
- Wireless/Networking Cards
- Portable Instruments
- Battery Powered Devices
- Low Voltage I/O System Power
- Multi Function Printer

All MPS parts are lead-free, halogen free, and adhere to the RoHS directive. For MPS green status, please visit MPS website under Quality Assurance. "MPS" and "The Future of Analog IC Technology" are Registered Trademarks of Monolithic Power Systems, Inc.

TYPICAL APPLICATION



Efficiency vs. Output Current



ORDERING INFORMATION

Part Number*	Package	Top Marking
MP2184GTL	SOT583	See Below

* For Tape & Reel, add suffix –Z (e.g. MP2184GTL–Z).

TOP MARKING

BGXY

LLL

BGX: product code of MP2184GTL
 Y: year code
 LLL: lot number

PACKAGE REFERENCE

