


[Products Category](#)
[Overview](#)
[Parametrics](#)
[Datasheet Download](#)
[Documents](#)
[Resources/Design-Tools](#)
[See Similar Parts](#)
[Quality & Reliability Data](#)
[Local Sales Contacts](#)
[Request Tech-Support](#)


## MP1475S

**High-Efficiency, 3A, 16V, 500kHz Synchronous, Step-Down Converter**

### DESCRIPTION

The MP1475S is a high-frequency, synchronous, rectified, step-down, switch-mode converter with built-in power MOSFETs. It offers a compact solution to achieve a 3A continuous output current with excellent load and line regulation over a wide input-supply range. The MP1475S has synchronous-mode operation for higher efficiency over the output current-load range.

Current-mode operation provides fast, transient response and eases loop stabilization.

Full protection features include over-current protection (OCP) and thermal shut down (TSD).

The MP1475S requires a minimal number of readily available, standard, external components and is available in a space-saving 8-pin TSOT23 package.

### FEATURES

- Wide 4.5V to 16V Operating-Input Range
- 120mΩ/50mΩ Low RDS(ON) Internal Power MOSFETs
- High-Efficiency Synchronous-Mode Operation
- Fixed 500kHz Switching Frequency
- Synchronizes from a 300kHz to 2MHz External Clock
- Power-Save Mode at Light Load
- Internal Soft-Start
- Power Good Indicator
- Over-Current Protection and Hiccup
- Thermal Shutdown
- Output Adjustable from 0.8V
- Available in a 8-pin TSOT-23 Package

### APPLICATIONS

- Notebook Systems and I/O Power
- Digital Set-Top Boxes
- Flat-Panel Television and Monitors
- Distributed Power Systems

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

### TYPICAL APPLICATION

