

AT715

1.5MHz, 800mA Synchronous Step-Down Converter



Immense Advance Tech.

FEATURES

- High Efficiency: Up to 96%
- 800mA Output Current
- 2.5V to 5.5V Input Voltage Range
- 1.5MHz Constant Frequency Operation
- No Schottky Diode Required
- Low Dropout Operation: 100% Duty Cycle
- 0.6V Reference Allows Low Output Voltages
- Shutdown Mode Draws $\leq 1\mu\text{A}$ Supply Current
- Current Mode Operation for Excellent Line and Load Transient Response
- Thermal Fault Production
- Short Circuit Protection

APPLICATION

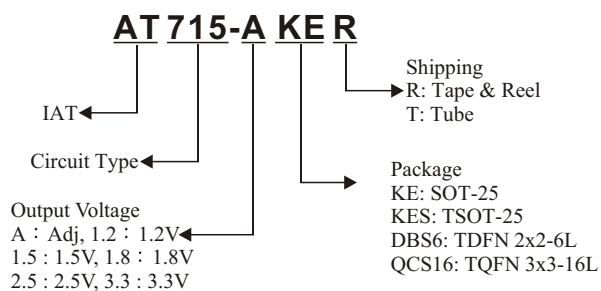
- Cellular Telephones
- Wireless and DSL Modems
- Digital Still Cameras
- Mp3 Players
- Portable Instruments
- Microprocessors and DSP Core Supplies

DESCRIPTION

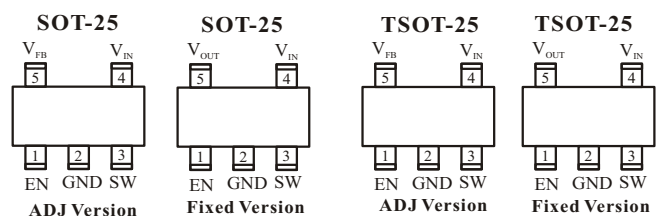
The AT715 is a 1.5MHz, constant frequency, slope compensated current mode PWM step down converter. The device integrates a main switch and a synchronous rectifier for high efficiency without an external Schottky diode. It is ideal for powering portable equipment that runs from a single cell lithium-Ion (Li+) battery.

The AT715 can supply 800mA of load current from a 2.5V to 5.5V input voltage. The output voltage can be regulated as low as 0.6V. The AT715 can also run at 100% duty cycle for low dropout operation, extending battery life in portable system. Idle mode operation at light loads provides very low output ripple voltage for noise sensitive applications.

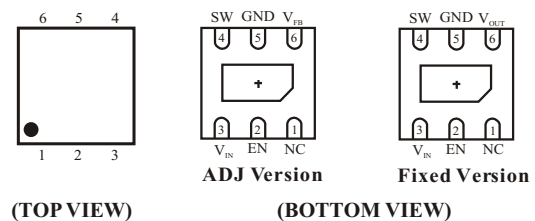
ORDERING INFORMATION



PIN CONFIGURATIONS (TOP VIEW)



TDFN 2x2-6L



TQFN 3x3-16L

