

# AT78L00

## 100mA Positive Voltage Regulator



Immense Advance Tech.

### FEATURES

- Internal Short-Circuit Current Limiting
- Internal Thermal Overload Protection
- No External Components Required
- Output Current Up to 100mA
- Output Voltage Tolerances of 3%
- Available in TO-92 and SOT-89 Package
- Direct replacement for LM78L00,  $\mu$ A78L00 and AN78L00 Series.

### APPLICATION

- Bias Supply for Analog Circuits
- Instrumentation and Audio Systems
- Logic Systems
- Others too numerous to mention

### DESCRIPTION

The AT78L00 series of three terminal positive regulators is available with several fixed output voltages making them useful in a wide range of applications. When used as a zener diode/resistor combination replacement, the AT78L00 usually results in an effective output impedance improvement of two orders of magnitude, and lower quiescent current. These regulators can provide local on card regulation, eliminating the distribution problems associated with single point regulation. The voltages available allow the AT78L00 to be used in logic systems, instrumentation, HiFi, and other solid state electronic equipment.

The AT78L00 is available in the plastic TO-92 package and SOT-89-3L package. With adequate heat sinking the regulator can deliver 100mA output current. Current limiting is included to limit the peak output current to a safe value. Safe area protection for the output transistors is provided to limit internal power dissipation. If internal power dissipation becomes too high for the heat sinking provided, the thermal shutdown circuit takes over preventing the IC from overheating.

### TYPICAL APPLICATION CIRCUITS

