

# AT5250

## 300mA CMOS Ultra - Low Dropout Positive Voltage Regulator



Immense Advance Tech.

### FEATURES

- **Maximum Output Current:** 300mA (within maximum power dissipation)
- **Output Voltage Range:** from 1.5 V to 5.0V in 0.1V increments
- **Highly Accurate:** Output voltage  $\pm 2\%$
- **Low Power Consumption:**  
Typ.  $1.0\mu\text{A}$  @  $V_{\text{OUT}} = 5.0\text{V}$
- **Input Stability:** typ.  $0.2\%/V$
- **Small Input-Output Differential:**  
 $0.4\text{V}$  at  $160\text{mA}$  ( $V_{\text{OUT}} = 3.3\text{V}$ )
- **Ultra Small Packages:**  
SOT-23 (150mW)  
SOT-89 (500mW)  
TO-92 (710mW)

### DESCRIPTION

The AT5250 is a group of positive voltage output, three-pin regulators, that provide a high current even when the input/output voltage differential is small. Low power consumption and high accuracy is achieved through CMOS and laser trimming technologies. The AT5250 consists of a high-precision voltage reference, an error amplification circuit, and a current limited output driver. Transient response to load variations have improved in comparison to the existing series.

### APPLICATION

- Battery Powered Equipment
- Palmtops
- Portable Cameras and Video Recorders
- Reference Voltage Sourced

### TYPICAL APPLICATION CIRCUITS

