

## LM100 Series Positive Voltage Regulators

### REFERENCE TABLE

Code	Stock No.
LM100H	19651G
LM200H	19655X
LM300H	19660E

### GENERAL DESCRIPTION

The LM100, LM200 and LM300 are integrated voltage regulators designed for a wide range of applications from digital power supplies to precision regulators for analog circuitry. Built on a single silicon chip, these devices are encapsulated in an 8-lead, low profile TO-5 header.

### FEATURES

Output voltage adjustable from 2V to 30V (LM300 adjustable from 2V to 20V)

Better than one per cent load and line regulation

One percent temperature stability  
Adjustable short-circuit limiting

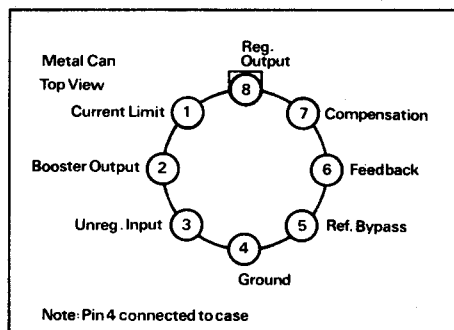
Output currents in excess of 5A possible by adding external transistors

Can be used as either a linear or high-efficiency switching regulator.

Additional features are fast response to both load and line transients, small standby power dissipation, freedom from oscillations with varying resistive and reactive loads, and the ability to start reliably on any load within rating.

The LM100 is specified for operation over the  $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$  military temperature range. The LM200 and LM300 are low cost, commercial-industrial versions of the LM100. They are identical to the LM100 except that they are specified for operation from  $-25^{\circ}\text{C}$  to  $85^{\circ}\text{C}$  and from  $0^{\circ}\text{C}$  to  $80^{\circ}\text{C}$  respectively.

### CONNECTION DIAGRAM



See outline drawing No. 97 for dimensions.

### ABSOLUTE MAXIMUM RATINGS

Input Voltage	
LM100, LM200	40V
LM300	35V
Input-Output Voltage Differential	
LM100, LM200	40V
LM300	30V
Power Dissipation	
LM100, LM200	800mW
LM300	800mW
Operating Temperature Range	
LM100	$-55^{\circ}\text{C}$ to $+150^{\circ}\text{C}$
LM200	$-25^{\circ}\text{C}$ to $+85^{\circ}\text{C}$
LM300	$0^{\circ}\text{C}$ to $70^{\circ}\text{C}$
Storage Temperature Range	$-65^{\circ}\text{C}$ to $150^{\circ}\text{C}$
Lead Temperature (soldering, 10 sec)	$300^{\circ}\text{C}$

PLEASE QUOTE STOCK NO. AND MANUFACTURER'S CODE WHEN ORDERING