

## 5V~12V 1A Low Dropout Regulator

### Features

- Dropout Voltage 0.9V @  $I_o = 1A$
- Dropout Voltage 0.45V @  $I_o = 0.5A$
- Output Current in Excess of 1A
- Output Voltage Accuracy  $\pm 2.5\%$
- Quiescent Current, Typically 1.2mA
- Internal Short Circuit Current Limit
- Internal Over Temperature Protection
- TO-252 and TO-263T 3pin Package

### General Description

The G98MXX positive voltage regulator is a family with output voltage from 5V to 12V, step 1V. It features the ability to source 1A of output current. The dropout voltage is 0.9V at 1A output current. The typical quiescent current is 1.2mA. Furthermore, the quiescent current is smaller when the regulator is in the dropout mode ( $V_{IN} < V_{OUT}$ ).

Familiar regulator features such as over temperature and over current protection circuits are provided to prevent it from being damaged by abnormal operating conditions.

### Ordering Information

| ORDER NUMBER | MARKING  | VOLTAGE | TEMP. RANGE | PIN OPTION |           |           | PACKAGE (Green) | REMARK          |
|--------------|----------|---------|-------------|------------|-----------|-----------|-----------------|-----------------|
|              |          |         |             | 1          | 2         | 3         |                 |                 |
| G98M05T45U   | 98M05    | 5V      | -40°C~85°C  | $V_{IN}$   | GND       | $V_{OUT}$ | TO-252          |                 |
| G98M08T45U   | 98M08    | 8V      | -40°C~85°C  | $V_{IN}$   | GND       | $V_{OUT}$ | TO-252          |                 |
| G98M09T45U   | 98M09    | 9V      | -40°C~85°C  | $V_{IN}$   | GND       | $V_{OUT}$ | TO-252          |                 |
| G98M12T45U   | 98M12    | 12V     | -40°C~85°C  | $V_{IN}$   | GND       | $V_{OUT}$ | TO-252          |                 |
| G98M05T45D   | 98M05    | 5V      | -40°C~85°C  | $V_{IN}$   | GND       | $V_{OUT}$ | TO-252          |                 |
| G98M08T45D   | 98M08    | 8V      | -40°C~85°C  | $V_{IN}$   | GND       | $V_{OUT}$ | TO-252          |                 |
| G98M09T45D   | 98M09    | 9V      | -40°C~85°C  | $V_{IN}$   | GND       | $V_{OUT}$ | TO-252          |                 |
| G98M12T45D   | 98M12    | 12V     | -40°C~85°C  | $V_{IN}$   | GND       | $V_{OUT}$ | TO-252          |                 |
| G98M05TU3U   | 98M05TU3 | 5V      | -40°C~85°C  | GND        | $V_{OUT}$ | $V_{IN}$  | TO-263T         | <b>OBSOLETE</b> |
| G98M08TU3U   | 98M08TU3 | 8V      | -40°C~85°C  | GND        | $V_{OUT}$ | $V_{IN}$  | TO-263T         | <b>OBSOLETE</b> |
| G98M09TU3U   | 98M09TU3 | 9V      | -40°C~85°C  | GND        | $V_{OUT}$ | $V_{IN}$  | TO-263T         | <b>OBSOLETE</b> |
| G98M12TU3U   | 98M12TU3 | 12V     | -40°C~85°C  | GND        | $V_{OUT}$ | $V_{IN}$  | TO-263T         | <b>OBSOLETE</b> |
| G98M05TU5U   | 98M05TU5 | 5V      | -40°C~85°C  | $V_{IN}$   | GND       | $V_{OUT}$ | TO-263T         | <b>OBSOLETE</b> |
| G98M08TU5U   | 98M08TU5 | 8V      | -40°C~85°C  | $V_{IN}$   | GND       | $V_{OUT}$ | TO-263T         | <b>OBSOLETE</b> |
| G98M09TU5U   | 98M09TU5 | 9V      | -40°C~85°C  | $V_{IN}$   | GND       | $V_{OUT}$ | TO-263T         | <b>OBSOLETE</b> |
| G98M12TU5U   | 98M12TU5 | 12V     | -40°C~85°C  | $V_{IN}$   | GND       | $V_{OUT}$ | TO-263T         | <b>OBSOLETE</b> |

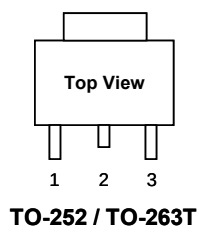
\* For other package types, pin options and package, please contact us at sales@gmt.com.tw

Note: T4:TO-252 TU: TO-263T

3 & 5: Bonding Code

U & D: Tape & Reel

### Package Type



### Typical Application Circuit

