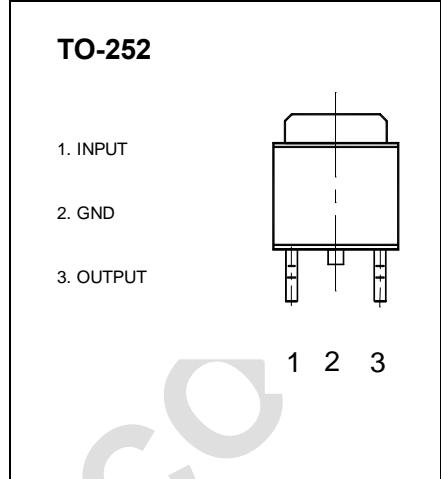


**WEJ78M09** Three-terminal positive voltage regulator**FEATURES**

Maximum Output current

I<sub>OM</sub>: 0.5 A

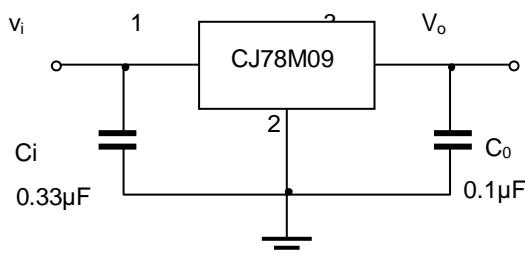
Output voltage

V<sub>o</sub>: 9 V**ABSOLUTE MAXIMUM RATINGS** (Operating temperature range applies unless otherwise specified)

| Parameter                 | Symbol           | Value      | Units |
|---------------------------|------------------|------------|-------|
| Input Voltage             | V <sub>i</sub>   | 11.5~26    | V     |
| Storage Temperature Range | T <sub>stg</sub> | -65 to 150 | °C    |

**ELECTRICAL CHARACTERISTICS** (V<sub>i</sub>=10V, I<sub>O</sub>=350mA, 0°C < T<sub>j</sub> < 125°C, C<sub>1</sub>=0.33μF, C<sub>0</sub>=0.1μF, unless otherwise specified)

| Parameter                | Symbol          | Test conditions  | MIN  | TYP | MAX  | UNIT |
|--------------------------|-----------------|--|------|-----|------|------|
| Output voltage           | V <sub>o</sub>  | T <sub>j</sub> =25°C   | 8.65 | 9   | 9.35 | V    |
|                          |                 | 11.5V≤V <sub>i</sub> ≤24V, I <sub>O</sub> =5mA~350mA                       | 8.55 | 9   | 9.45 | V    |
| Load Regulation          | ΔV <sub>o</sub> | T <sub>j</sub> =25°C, I <sub>O</sub> =5mA~500mA                            |      |     | 180  | mV   |
|                          |                 | T <sub>j</sub> =25°C, I <sub>O</sub> =5mA~200mA                            |      |     | 90   | mV   |
| Line regulation          | ΔV <sub>o</sub> | 11.5V≤V <sub>i</sub> ≤26V, I <sub>O</sub> =200mA ,<br>T <sub>j</sub> =25°C |      |     | 100  | mV   |
|                          |                 | 12V≤V <sub>i</sub> ≤26V, I <sub>O</sub> =200mA , T <sub>j</sub> =25°C      |      |     | 50   | mV   |
| Quiescent Current        | I <sub>q</sub>  | T <sub>j</sub> =25°C   |      |     | 6    | mA   |
| Quiescent Current Change | ΔI <sub>q</sub> | 11.5V≤V <sub>i</sub> ≤26V, I <sub>O</sub> =200mA                           |      |     | 0.8  | mA   |
|                          | ΔI <sub>q</sub> | 5mA≤I <sub>O</sub> ≤350mA  |      |     | 0.5  | mA   |
| Output Noise Voltage     | V <sub>N</sub>  | 10Hz≤f≤100KHz, T <sub>j</sub> =25°C  |      | 60  |      | μV   |
| Dropout Voltage          | V <sub>d</sub>  | T <sub>j</sub> =25°C   |      | 2   |      | V    |

**TYPICAL APPLICATION**

Note: Bypass capacitors are recommended for optimum stability and transient response and should be located as close as possible to the regulators.