



TO-251-3L/TO-252-2L Plastic-Encapsulate Regulators

CJ78M06 Three-terminal positive voltage regulator

FEATURES

Maximum output current

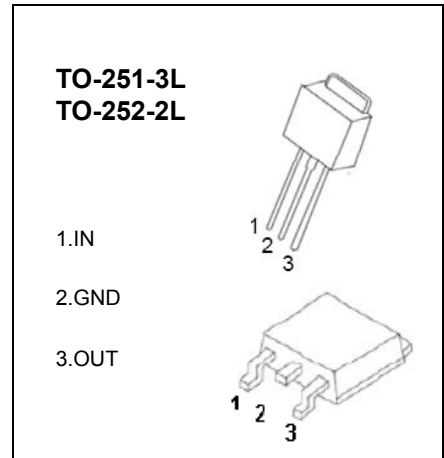
I_{OM} : 0.5 A

Output voltage

V_O : 6V

Continuous total dissipation

P_D : 1.25 W



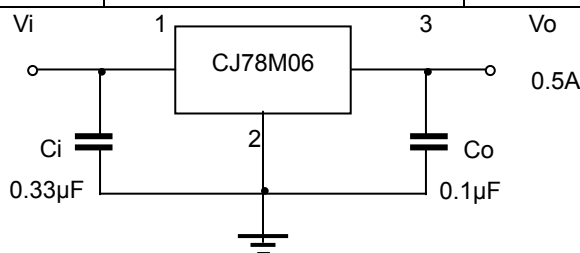
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

| Parameter | Symbol | Value | Unit |
|--------------------------------------|-----------|----------|------|
| Input Voltage | V_i | 25 | V |
| Operating Junction Temperature Range | T_{OPR} | 0-+125 | °C |
| Storage Temperature Range | T_{STG} | -65-+150 | °C |

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE ($V_i=11V$, $I_O=350mA$, $C_i=0.33\mu F$, $C_o=0.1\mu F$, unless otherwise specified)

| Parameter | Symbol | Test conditions | Min | Typ | Max | Unit | |
|--------------------------|--------------|--|---------|------|-----|------|----|
| Output Voltage | V_o | | 25°C | 5.75 | 6 | 6.25 | V |
| | | $8V \leq V_i \leq 21V$, $I_o=5mA-350mA$ $P_o \leq 15W$ | 0-125°C | 5.7 | 6 | 6.3 | V |
| Load Regulation | ΔV_o | $I_o=5mA-0.5A$ | 25°C | | 18 | 120 | mV |
| | | $I_o=5mA-200mA$ | 25°C | | 10 | 60 | mV |
| Line Regulation | ΔV_o | $8V \leq V_i \leq 25V$, $I_o=200mA$ | 25°C | | 5 | 100 | mV |
| | | $9V \leq V_i \leq 25V$, $I_o=200mA$ | 25°C | | 1.5 | 50 | mV |
| Quiescent Current | I_q | | 25°C | | 4.3 | 6 | mA |
| Quiescent Current Change | ΔI_q | $9V \leq V_i \leq 25V$, $I_o=200mA$ | 0-125°C | | | 0.8 | mA |
| | ΔI_q | $5mA \leq I_o \leq 350mA$ | 0-125°C | | | 0.5 | mA |
| Output Noise Voltage | V_N | $10Hz \leq f \leq 100KHz$ | 25°C | | 45 | uV | |
| Ripple Rejection | RR | $9V \leq V_i \leq 19V$, $f=120Hz$, $I_o=300mA$ | 0-125°C | 59 | 80 | | dB |
| Dropout Voltage | V_d | $I_o=350mA$ | 25°C | | 2 | | V |
| Short Circuit Current | I_{sc} | $V_i=11V$ | 25°C | | 270 | | mA |
| Peak Current | I_{pk} | | 25°C | | 0.5 | | A |

TYPICAL APPLICATION



Typical Characteristics

CJ78M06

