

Three-terminal positive voltage regulator

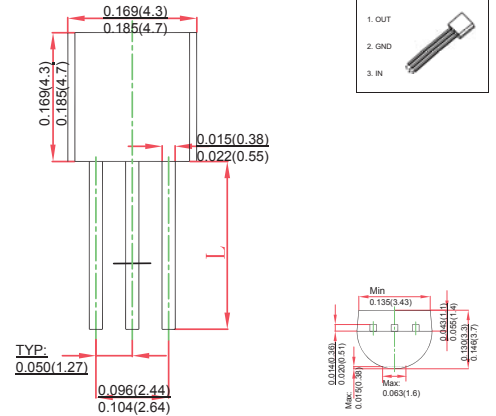
FEATURES

- Maximum output current I_{OM}: 0.1A
- Output voltage V_O: -12V
- Continuous total dissipation
P_D: 0.625 W (T_a = 25 °C)

MECHANICAL DATA

- Case: TO-92 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any

TO-92



ABSOLUTE MAXIMUM RATINGS

(Operating temperature range applies unless otherwise specified)

| Parameter | Symbol | Value | Unit |
|---|------------------|----------|------|
| Input Voltage | V _i | -35 | V |
| Thermal Resistance from Junction to Ambient | R _{θJA} | 200 | °C/W |
| Operating Junction Temperature Range | T _{OPR} | 0~+150 | °C |
| Storage Temperature Range | T _{STG} | -65~+150 | °C |

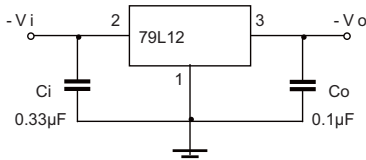
ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE

(V_i = -19V, I_o = 40mA, C_i = 0.33 μF, C_o = 0.1 μF, unless otherwise specified)

| Parameter | Symbol | Test conditions | Min | Typ | Max | Unit | |
|--------------------------|-----------------|--|---|-------|--------|-------------------|---|
| Output Voltage | V _o | 25°C | -11.52 | -12 | -12.48 | V | |
| | | 0-125°C | -14.5V ≤ V _i ≤ -27V, I _o = 1mA~40mA | -11.4 | -12 | -12.6 | V |
| | | | I _o = 1mA~70mA | -11.4 | -12 | -12.6 | V |
| Load Regulation | ΔV _o | I _o = 1mA~100mA, 25°C | | 24 | 100 | mV | |
| | | I _o = 1mA~40mA, 25°C | | 15 | 50 | mV | |
| Line Regulation | ΔV _o | -14.5V ≤ V _i ≤ -27V, 25°C | | 50 | 250 | mV | |
| | | -16V ≤ V _i ≤ -27V, 25°C | | 40 | 200 | mV | |
| Quiescent Current | I _q | 25°C | | | 6.5 | mA | |
| Quiescent Current Change | ΔI _q | -16V ≤ V _i ≤ -27V, 0-125°C | | | 1.5 | mA | |
| | ΔI _q | 1mA ≤ I _o ≤ 40mA, 0-125°C | | | 0.1 | mA | |
| Output Noise Voltage | V _N | 10Hz ≤ f ≤ 100KHz, 25°C | | 80 | | μV/V _o | |
| Ripple Rejection | RR | -15V ≤ V _i ≤ -25V, f = 120Hz, 0-125°C | 37 | 42 | | dB | |
| Dropout Voltage | V _d | 25°C | | 1.7 | | V | |

* Pulse test.

TYPICAL APPLICATION



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

RATINGS AND CHARACTERISTIC CURVES

TYPICAL APPLICATION

