



SOT-89 Encapsulate Three Terminal Voltage Regulator

79L15 Three-terminal negative voltage regulator

FEATURES

Maximum Output current

I_{OM} : 100 mA

Output voltage

V_O : -15 V

Continuous total dissipation

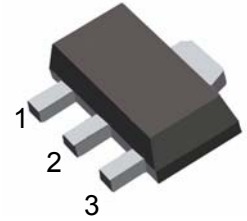
P_D : 0.5 W

SOT-89

1. GND

2. IN

3. OUT



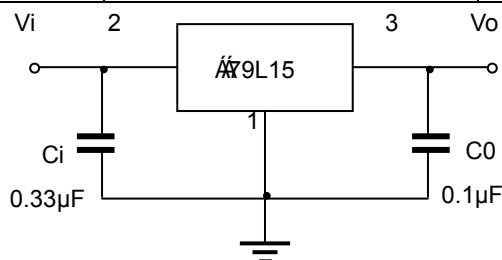
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

| Parameter | Symbol | Value | Units |
|--------------------------------------|-----------|----------|-------|
| Input Voltage | V_i | -35 | V |
| Operating Junction Temperature Range | T_{OPR} | 0~+125 | °C |
| Storage Temperature Range | T_{STG} | -55~+150 | °C |

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE ($V_i=-23V, I_o=40mA, C_i=0.33\mu F, C_o=0.1\mu F$, unless otherwise specified)

| Parameter | Symbol | Test conditions | MIN | TYP | MAX | UNIT |
|--------------------------|--------------|---|---------|-----|--------|------|
| Output voltage | V_o | 25°C | -14.4 | -15 | -15.6 | V |
| | | -17.5V ≤ V_i ≤ -30V, $I_o=1mA\sim 40mA$ | -14.25 | -15 | -15.75 | V |
| | | 0-125°C $I_o=1mA\sim 70mA$ | -14.25 | -15 | -15.75 | V |
| Load Regulation | ΔV_o | $I_o=1mA\sim 100mA, V_i=-23V$ | 25°C | 25 | 150 | mV |
| | | $I_o=1mA\sim 40mA, V_i=-23V$ | 25°C | 15 | 75 | mV |
| Line regulation | ΔV_o | -17.5V ≤ V_i ≤ -30V, $I_o=40mA$ | 25°C | 65 | 300 | mV |
| | | -20V ≤ V_i ≤ -30V, $I_o=40mA$ | 25°C | 50 | 250 | mV |
| Quiescent Current | I_q | 25°C | | | 6.5 | mA |
| Quiescent Current Change | ΔI_q | -20V ≤ V_i ≤ -30V, $I_o=40mA$ | 0-125°C | | 1.5 | mA |
| | ΔI_q | $1mA \leq I_o \leq 40mA$ | 0-125°C | | 0.1 | mA |
| Output Noise Voltage | V_N | 10Hz ≤ f ≤ 100KHz | 25°C | 90 | | μV |
| Ripple Rejection | RR | -18.5V ≤ V_i ≤ -28.5V, $f=120Hz$ | 0-125°C | 34 | 39 | dB |
| Dropout Voltage | V_d | 25°C | | 1.7 | | 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.

Typical Characteristics

79LXX

