

## Three-terminal positive voltage regulator

### FEATURES

Maximum Output current  $I_O$ : 0.1 A

Output voltage  $V_O$ : -6 V

Continuous total dissipation  $P_D$ : 0.35 W ( $T_a=25^\circ\text{C}$ )

### ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies)

| Parameter                            | Symbol    | Value   | Unit             |
|--------------------------------------|-----------|---------|------------------|
| Input Voltage                        | $V_I$     | -30     | V                |
| Operating Junction Temperature Range | $T_{OPR}$ | 0-150   | $^\circ\text{C}$ |
| Storage Temperature Range            | $T_{STG}$ | -65-150 | $^\circ\text{C}$ |

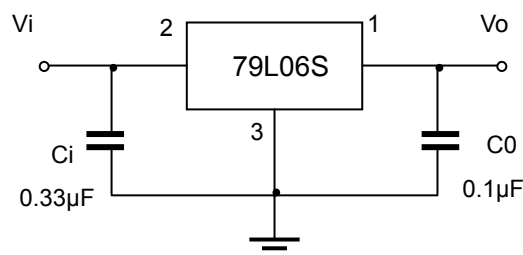


### ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE ( $V_i=-11\text{V}, I_o=40\text{mA}, C_i=0.33\mu\text{F}, C_o=0.1\mu\text{F}$ , unless otherwise specified )

| Parameter                | Symbol | Test conditions                                  | Min                    | Typ  | Max   | Unit |               |
|--------------------------|--------|--|------------------------|------|-------|------|---------------|
| Output voltage           | $V_o$  | $25^\circ\text{C}$                               | -5.75                  | -6.0 | -6.25 | V    |               |
|                          |        | -8V $V_i$ -20V, $I_o=1\text{mA}\sim 40\text{mA}$ | 0-125 $^\circ\text{C}$ | -5.7 | -6.0  | -6.3 | V             |
|                          |        | $I_o=1\text{mA}\sim 70\text{mA}$                 |                        | -5.7 | -6.0  | -6.3 | V             |
| Load Regulation          | $V_o$  | $I_o=1\text{mA}\sim 100\text{mA}$                | $25^\circ\text{C}$     |      | 21    | 80   | mV            |
|                          |        | $I_o=1\text{mA}\sim 40\text{mA}$                 | $25^\circ\text{C}$     |      | 11    | 40   | mV            |
| Line regulation          | $V_o$  | -8V $V_i$ -20V                                   | $25^\circ\text{C}$     |      | 20    | 175  | mV            |
|                          |        | -9V $V_i$ -20V                                   | $25^\circ\text{C}$     |      | 15    | 125  | mV            |
| Quiescent Current        | $I_q$  |  | $25^\circ\text{C}$     |      | 3.9   | 6    | mA            |
| Quiescent Current Change | $I_q$  | -9V $V_i$ -20V                                   | 0-125 $^\circ\text{C}$ |      |       | 1.5  | mA            |
|                          |        | 1mA $I_o$ 40mA                                   | 0-125 $^\circ\text{C}$ |      |       | 0.1  | mA            |
| Output Noise Voltage     | $V_N$  | 10Hz f 100KHz                                    | $25^\circ\text{C}$     |      | 44    |      | $\mu\text{V}$ |
| Ripple Rejection         | RR     | -9V $V_i$ -19V, $f=120\text{Hz}$                 | 0-125 $^\circ\text{C}$ | 40   | 48    |      | dB            |
| Dropout Voltage          | $V_d$  |  | $25^\circ\text{C}$     |      | 1.7   |      | V             |

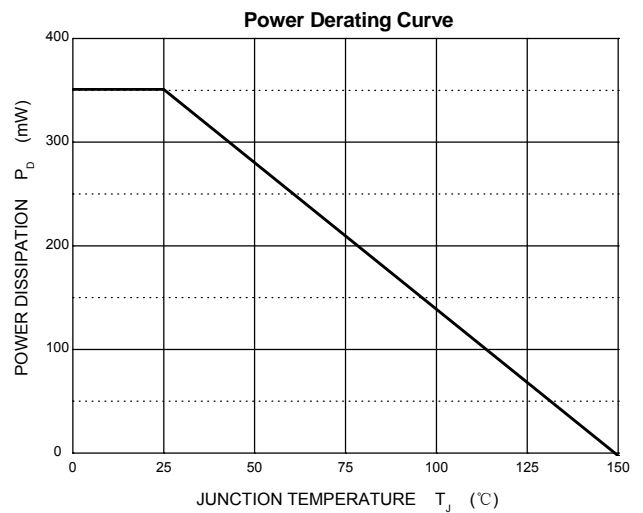
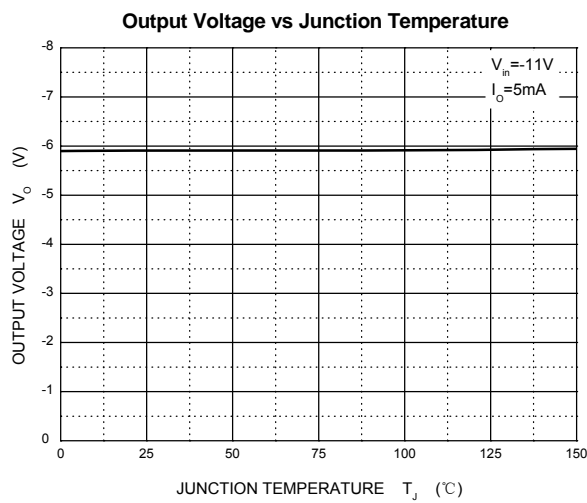
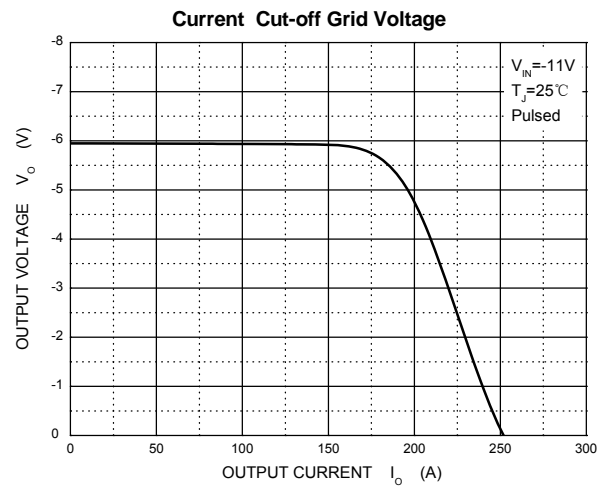
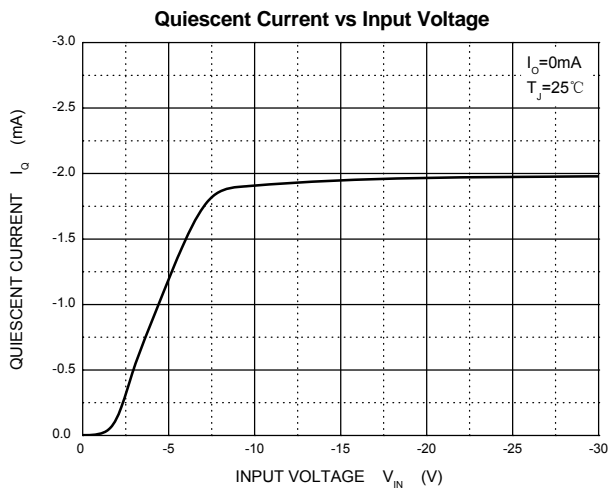
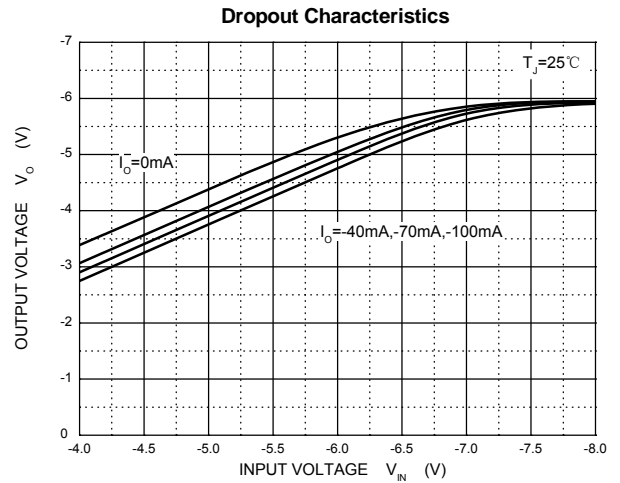
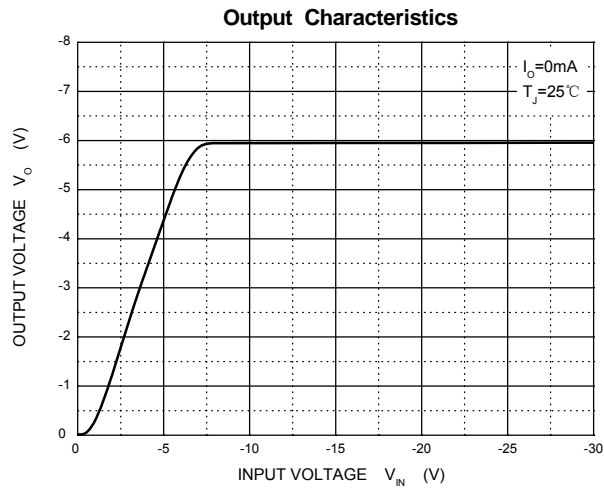
\* Pulse test.

### TYPICAL APPLICATION



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

## Typical Characteristics



PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

