



## SOT-89-3L Three Terminal Regulator 三端稳压 IC

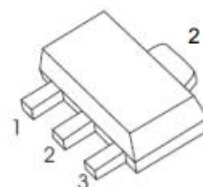
### ■Features 特点

Pin 脚位: 1.Output 输出 2.Ground 地 3.Input 输入

Output Voltage 输出电压: 6V

Output Current 输出电流: 0.1A

Power dissipation 耗散功率: 0.6W



### ■Absolute Maximum Ratings 最大额定值

( $T_A=25^{\circ}\text{C}$  unless otherwise noted 如无特殊说明, 温度为  $25^{\circ}\text{C}$ )

| Characteristic 特性参数                         | Symbol 符号       | Rat 额定值                      | Unit 单位                     |
|---------------------------------------------|-----------------|------------------------------|-----------------------------|
| Input Voltage 输入电压                          | $V_i$           | 30                           | V                           |
| Operating Current 工作电流                      | $I_o$           | 100                          | mA                          |
| Power dissipation 耗散功率                      | $P_D$           | 600                          | mW                          |
| Thermal Resistance Junction-Ambient 热阻      | $R_{\theta JA}$ | 208                          | $^{\circ}\text{C}/\text{W}$ |
| Solder Temperature 焊接温度/时间                  | $T_d$           | 260                          | $^{\circ}\text{C}$          |
| Solder Temperature/Time 焊接时间                | $T_d$           | 10                           | S                           |
| Operating Ambient Temperature 工作温度          | $T_A$           | -40~+125                     | $^{\circ}\text{C}$          |
| Junction and Storage Temperature<br>结温和储藏温度 | $T_J, T_{stg}$  | -55to+150 $^{\circ}\text{C}$ |                             |

### ■Device Marking 产品字标

78L06-2AF=78L06

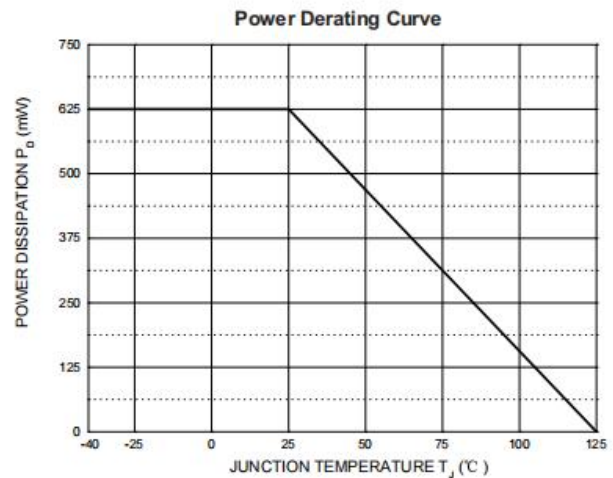
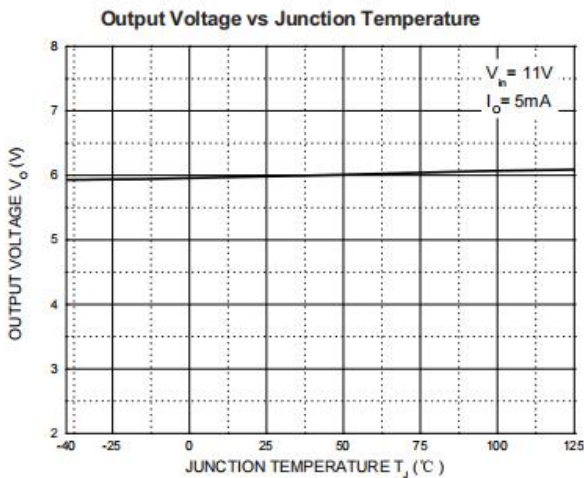
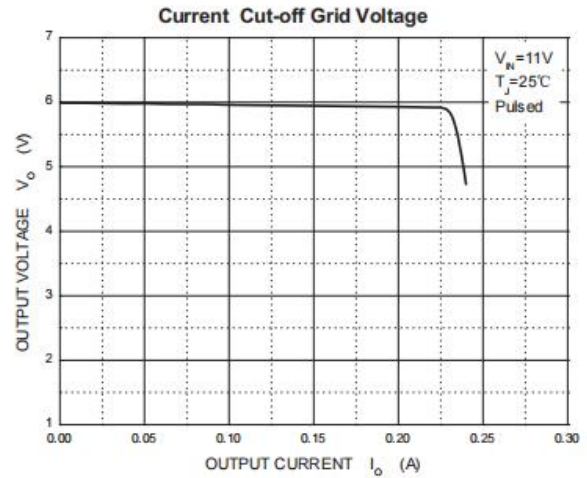
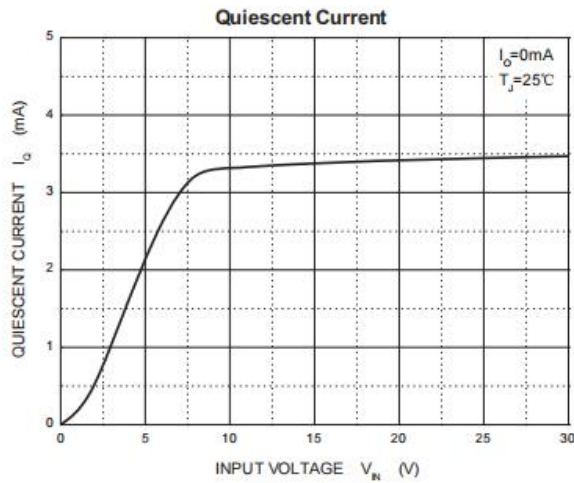
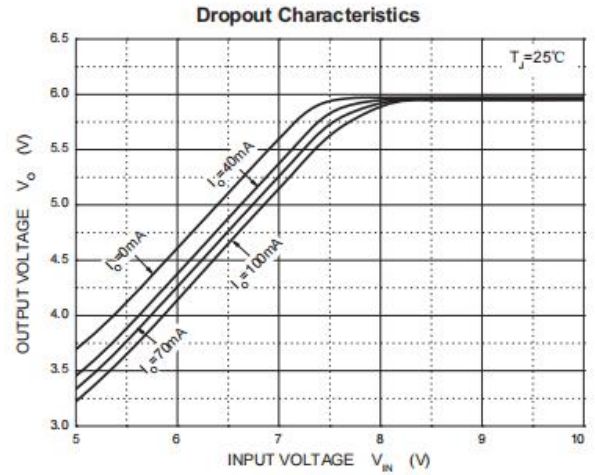
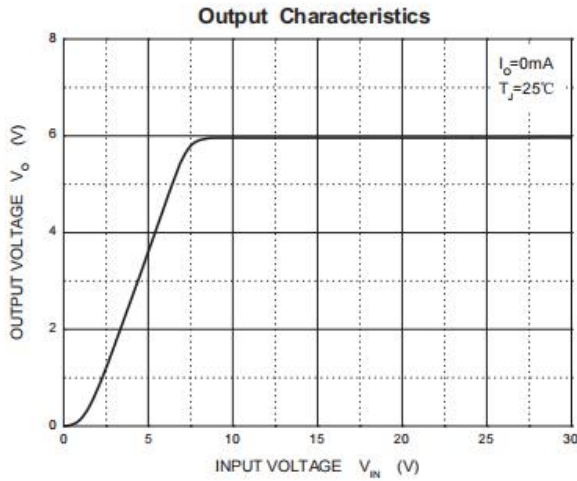


### ■Electrical Characteristics 电特性

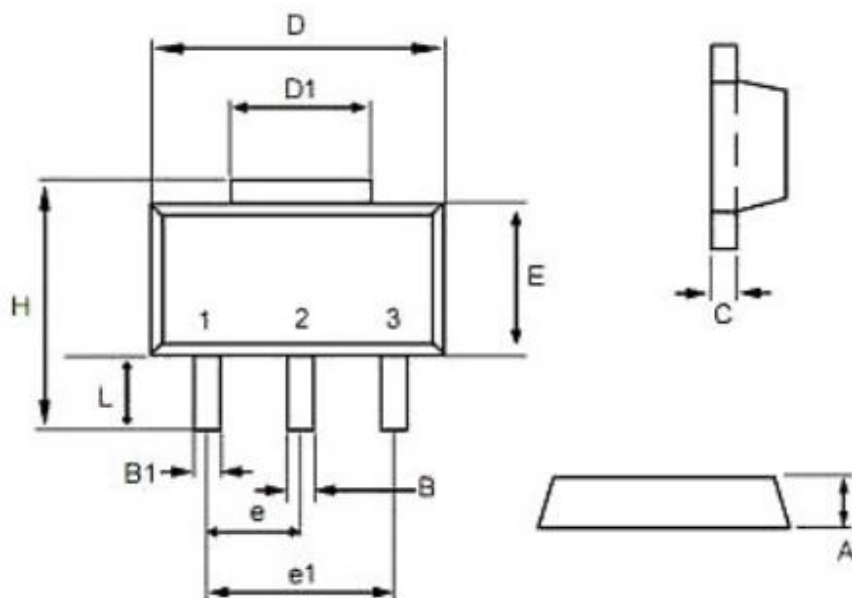
( $V_I=11V$   $I_O=40mA$   $C_i=0.33\mu F$   $C_o=0.1\mu F$   $T_A=25^\circ C$  unless otherwise noted 如无特殊说明 )

| Characteristic<br>特性参数             | Symbol<br>符号 | Test Condition<br>测试条件                             | Min<br>最小值 | Type<br>典型值 | Max<br>最大值 | Unit<br>单位  |
|------------------------------------|--------------|----------------------------------------------------|------------|-------------|------------|-------------|
| Output Voltage<br>输出电压             | $V_O$        | $V_I=11V$<br>$I_O=40mA$                            | 5.82       | 6           | 6.18       | V           |
| Output Voltage<br>输出电压             | $V_O$        | $8V \leq V_I \leq 20V$<br>$1mA \leq I_O \leq 40mA$ | 5.7        |             | 6.3        | V           |
| Output Voltage<br>输出电压             | $V_O$        | $8V \leq V_I \leq 20V$<br>$1mA \leq I_O \leq 70mA$ | 5.7        |             | 6.3        | V           |
| Output Current<br>输出电流             | $I_O$        | $V_I=11V$                                          |            | 100         |            | mA          |
| Dropout Voltage<br>落差电压            | $V_D$        | $I_O=40mA$                                         |            | 1.7         |            | V           |
| Quiescent Current<br>静态电流          | $I_q$        | $V_I=11V$<br>$I_O=0$                               |            | 3.9         | 6          | mA          |
| Quiescent Current Change<br>静态电流变化 | $\Delta I_q$ | $9V \leq V_I \leq 20V$                             |            |             | 1.5        | mA          |
| Quiescent Current Change<br>静态电流变化 | $\Delta I_q$ | $1mA \leq I_O \leq 40mA$                           |            |             | 0.1        | mA          |
| Line Regulation<br>线性调整            | $\Delta V_O$ | $I_O=40mA$<br>$8V \leq V_I \leq 20V$               |            | 35          | 175        | mV          |
| Line Regulation<br>线性调整            | $\Delta V_O$ | $I_O=40mA$<br>$9V \leq V_I \leq 20V$               |            | 29          | 125        | mV          |
| Load Regulation<br>负载调整            | $\Delta V_O$ | $1mA \leq I_O \leq 100mA$<br>$V_I=11V$             |            | 16          | 80         | mV          |
| Load Regulation<br>负载调整            | $\Delta V_O$ | $1mA \leq I_O \leq 40mA$<br>$V_I=11V$              |            | 9           | 40         | mV          |
| Output Noise Voltage<br>噪声电压       | $V_N$        | $10Hz \leq f \leq 100kHz$                          |            | 46          |            | $\mu V/V_O$ |
| Ripple Rejection<br>纹波抑制           | RR           | $9V \leq V_I \leq 19V$<br>$f=120Hz$                | 40         | 48          |            | dB          |

## ■ Typical Characteristic Curve 典型特性曲线



## ■SOT-89-3L Dimension 外形封装尺寸



| Symbol | Dimensions In Millimeters |      | Dimensions In Inches |       |
|--------|---------------------------|------|----------------------|-------|
|        | Min                       | Max  | Min                  | Max   |
| A      | 1.40                      | 1.60 | 0.055                | 0.063 |
| B      | 0.40                      | 0.56 | 0.016                | 0.022 |
| B1     | 0.35                      | 0.48 | 0.014                | 0.019 |
| C      | 0.35                      | 0.44 | 0.014                | 0.017 |
| D      | 4.40                      | 4.60 | 0.173                | 0.181 |
| D1     | 1.35                      | 1.83 | 0.053                | 0.072 |
| e      | 1.45                      | 1.55 | 0.057                | 0.061 |
| e1     | 2.95                      | 3.05 | 0.116                | 0.120 |
| E      | 2.29                      | 2.60 | 0.090                | 0.102 |
| H      | 3.75                      | 4.25 | 0.148                | 0.167 |
| L      | 0.80                      | 1.20 | 0.031                | 0.047 |