

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

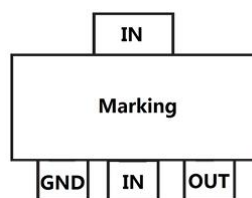
### ■Features 特点

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

Output Voltage 输出电压: -5V

Output Current 输出电流: 0.1A

Power dissipation 耗散功率: 0.5W



### ■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       | $T_A$           | 0~+150                       | $^{\circ}\text{C}$          |
| Junction and Storage Temperature 结温和储藏温度 | $T_J, T_{stg}$  | -55to+150 $^{\circ}\text{C}$ |                             |

### ■Device Marking 产品字标

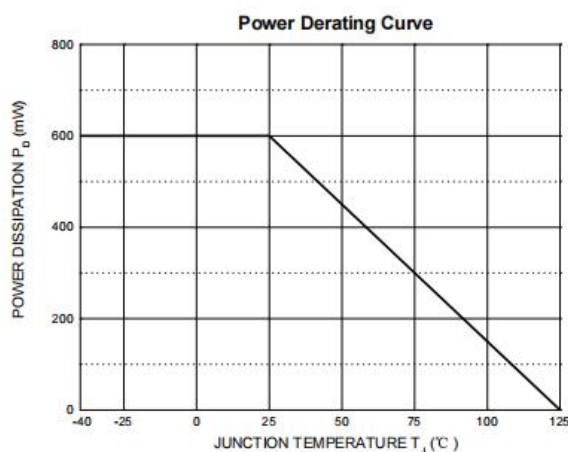
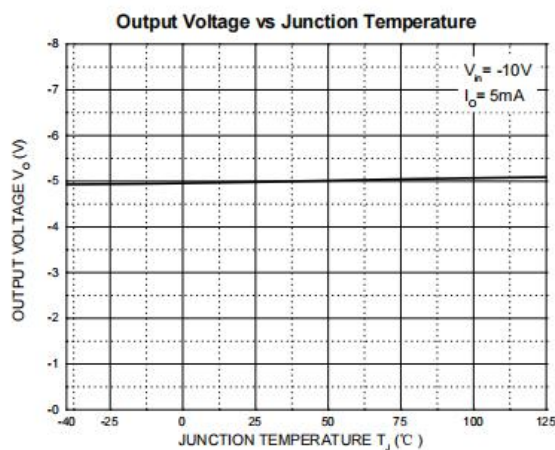
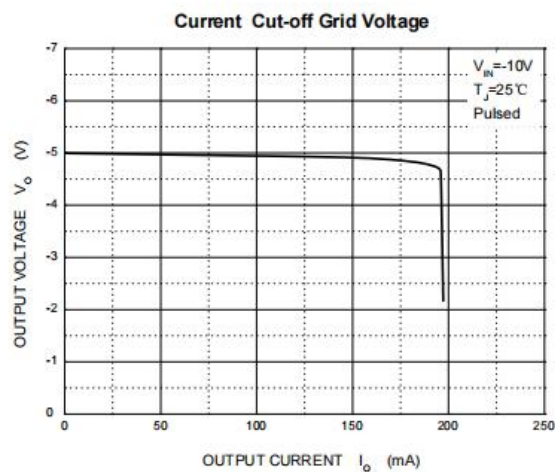
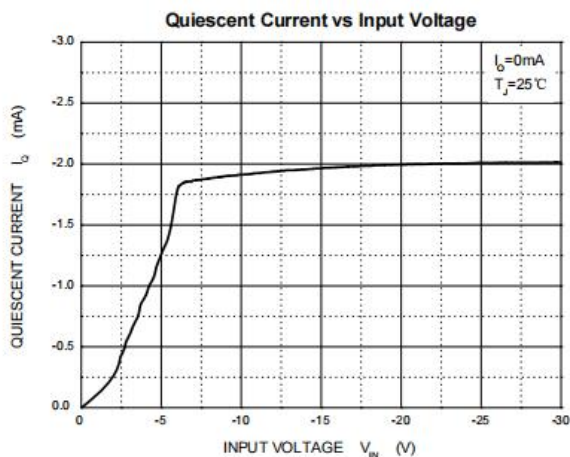
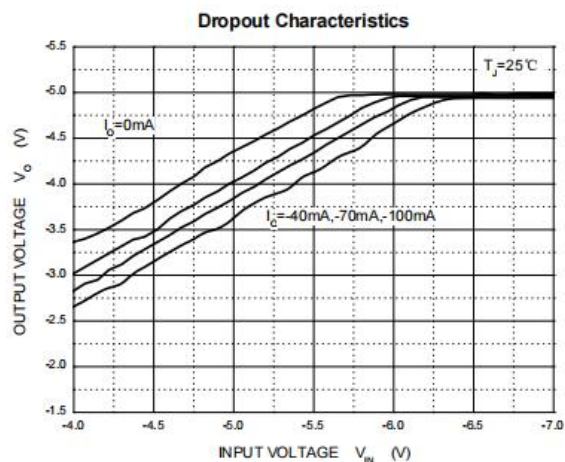
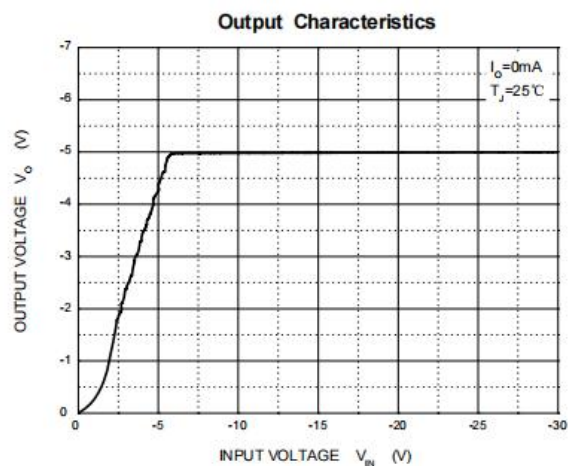
79L05-2AF=79L05

**■Electrical Characteristics 电特性**

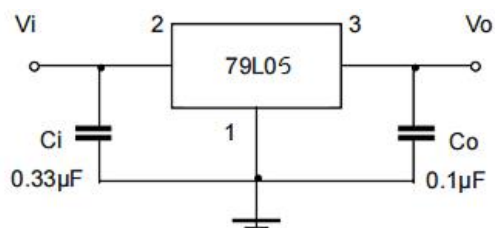
(Vi= -10V Io= 40mA Ci=0.33uF Co=0.1uF TA=25°C unless otherwise noted 如无特殊说明 )

| 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             | VO           | VI= -10V 25°C<br>Io= 40mA              | -4.85      | -5          | -5.15      | V          |
| Output Voltage<br>输出电压             | VO           | -7V≤VI≤ -20V<br>1mA≤Io≤40mA<br>0~125°C | -4.75      | -5          | -5.25      | V          |
| Output Voltage<br>输出电压             | VO           | VI= -10V<br>1mA≤Io≤70mA<br>0~125°C     | -4.75      | -5          | -5.25      | V          |
| Dropout Voltage<br>落差电压            | VD           | Io=40mA<br>25°C                        |            | -1.7        |            | V          |
| Quiescent Current<br>静态电流          | Iq           | VI= -10V<br>Io=0 25°C                  |            | 2           | 6          | mA         |
| Quiescent Current Change<br>静态电流变化 | ΔIq          | -8V≤VI≤ -20V<br>0~125°C                |            |             | 1.5        | mA         |
| Quiescent Current Change<br>静态电流变化 | ΔIq          | 1mA≤Io≤40mA<br>0~125°C                 |            |             | 0.1        | mA         |
| Line Regulation<br>线性调整            | ΔVO          | Io=40mA 25°C<br>-7V≤VI≤ -20V           |            | 15          | 150        | mV         |
| Line Regulation<br>线性调整            | ΔVO          | Io=40mA 25°C<br>-8V≤VI≤ -20V           |            | 12          | 100        | mV         |
| Load Regulation<br>负载调整            | ΔVO          | 1mA≤Io≤100mA<br>VI= -10V 25°C          |            | 20          | 60         | mV         |
| Load Regulation<br>负载调整            | ΔVO          | 1mA≤Io≤40mA<br>VI= -10V 25°C           |            | 10          | 30         | mV         |
| Output Noise Voltage<br>噪声电压       | VN           | 10Hz≤f≤100kHz<br>25°C                  |            | 40          |            | μV/VO      |
| Ripple Rejection<br>纹波抑制           | RR           | -8V≤VI≤ -18V<br>f=120Hz 0~125°C        | 41         | 49          |            | dB         |

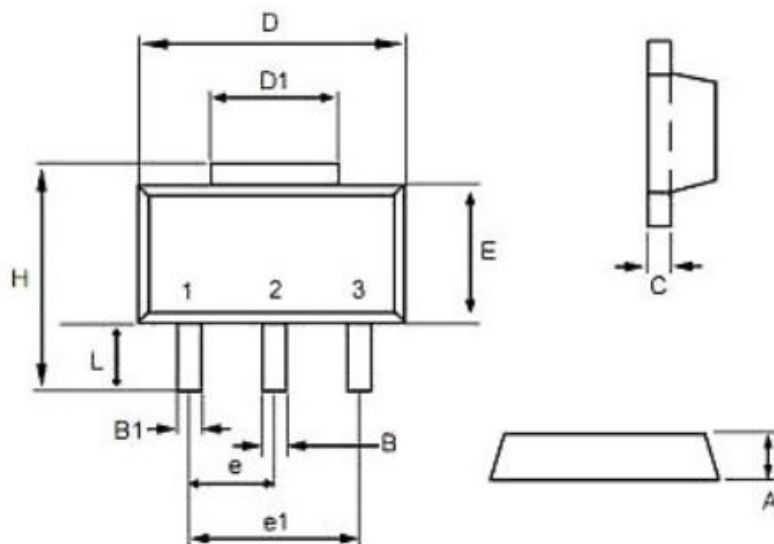
■ Typical Characteristic Curve 典型特性曲线



■ Typical Application 典型应用



■ 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 |