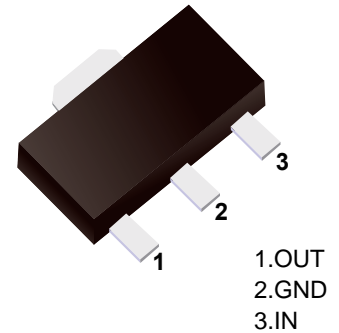


■ Three-Terminal Positive Voltage Regulator



■ Features

- Maximum Output current I_o : 0.1A
- Output Voltage V_o : 12V
- Continuous Total Dissipation P_d : 0.5W ($T_a = 25^\circ\text{C}$)

■ Simplified outline(SOT-89)

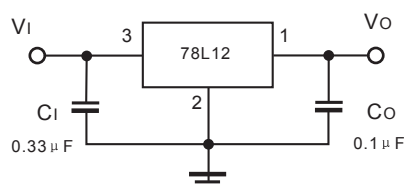
■ Absolute Maximum Ratings (Operating temperature range applies unless otherwise specified)

| Parameter | Symbol | Rating | Unit |
|--------------------------------------|-----------|------------|------------------|
| Input Voltage | V_i | 35 | V |
| Operating Junction Temperature Range | T_{opr} | -55 ~ +125 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{stg} | -55 ~ +150 | $^\circ\text{C}$ |

■ Electrical Characteristics ($V_i=19\text{V}$, $I_o=40\text{mA}$, $C_i=0.33\ \mu\text{F}$, $C_o=0.1\ \mu\text{F}$, unless otherwise specified)

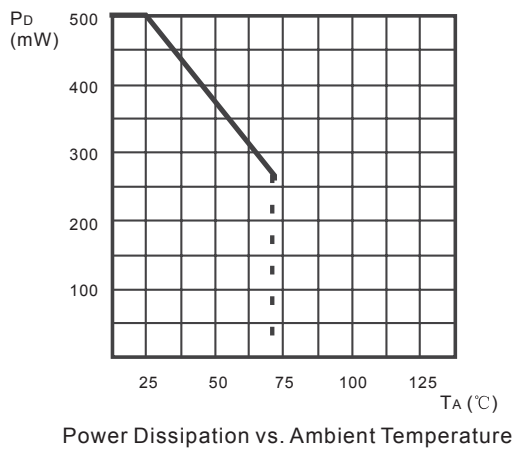
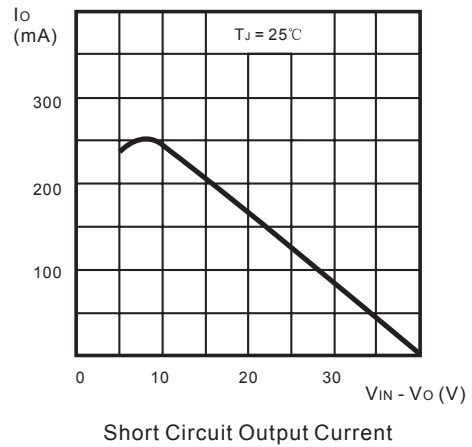
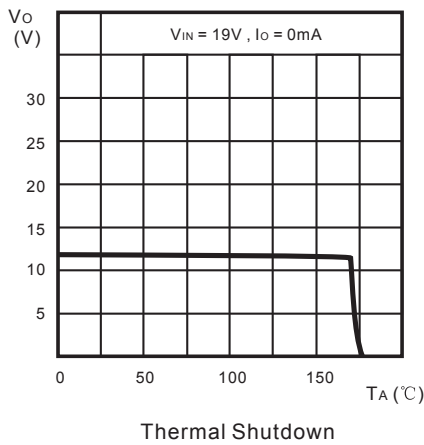
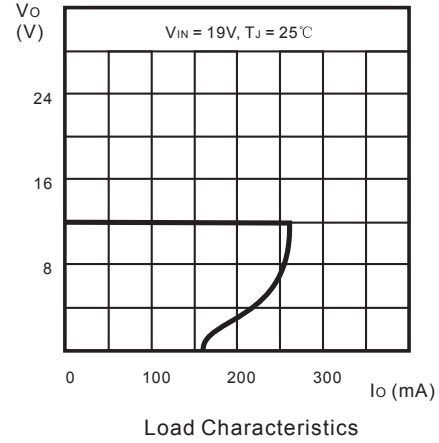
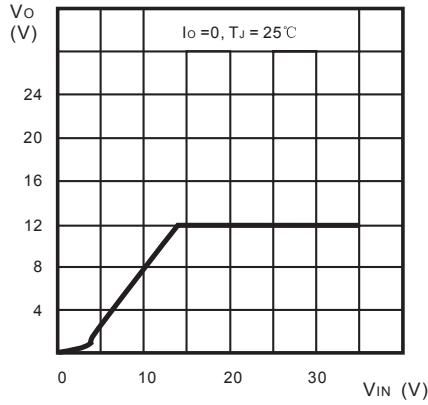
| Parameter | Symbol | Test conditions | Min | Typ | Max | Unit |
|--------------------------|--------------|--|------|-----|------|---------------|
| Output Voltage | V_o | $T_J = 25^\circ\text{C}$ | 11.5 | 12 | 12.5 | V |
| | | $T_J = 0\sim 125^\circ\text{C}$, $14\text{V} \leq V_i \leq 27\text{V}$, $I_o=1\text{mA}\sim 40\text{mA}$ | 11.4 | 12 | 12.6 | V |
| | | $T_J = 0\sim 125^\circ\text{C}$, $I_o=1\text{mA}\sim 70\text{mA}$ | 11.4 | 12 | 12.6 | V |
| Load Regulation | ΔV_o | $T_J = 25^\circ\text{C}$, $I_o=1\text{mA}\sim 100\text{mA}$ | | 22 | 100 | mV |
| | | $T_J = 25^\circ\text{C}$, $I_o=1\text{mA}\sim 40\text{mA}$ | | 13 | 50 | mV |
| Line Regulation | ΔV_o | $T_J = 25^\circ\text{C}$, $14.5\text{V} \leq V_i \leq 27\text{V}$ | | 55 | 250 | mV |
| | | $T_J = 25^\circ\text{C}$, $16\text{V} \leq V_i \leq 27\text{V}$ | | 49 | 200 | mV |
| Quiescent Current | I_q | $T_J = 25^\circ\text{C}$ | | 4.3 | 6.5 | mA |
| Quiescent current Change | ΔI_q | $T_J = 0\sim 125^\circ\text{C}$, $16\text{V} \leq V_i \leq 27\text{V}$ | | | 1.5 | mA |
| | | $T_J = 0\sim 125^\circ\text{C}$, $1\text{mA} \leq I_o \leq 40\text{mA}$ | | | 0.1 | mA |
| Output Noise Voltage | V_N | $T_J = 25^\circ\text{C}$, $10\text{Hz} \leq f \leq 100\text{KHz}$ | | 70 | | μV |
| Ripple Rejection | RR | $T_J = 0\sim 125^\circ\text{C}$, $15\text{V} \leq V_i \leq 25\text{V}$, $f = 120\text{Hz}$ | 37 | 42 | | dB |
| Dropout Voltage | V_D | $T_J = 25^\circ\text{C}$ | | 1.7 | | V |

■ Typical Application



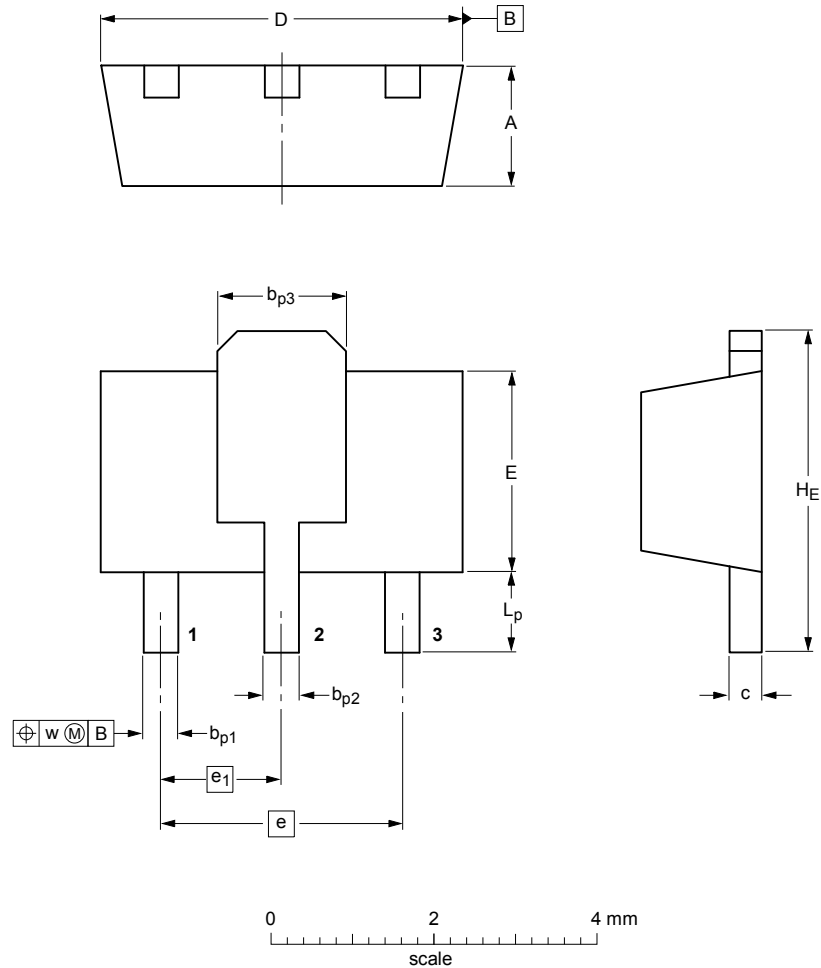
Note: Bypass capacitors are recommended for optimum stability and transient response and should be located as close as possible to the regulators.

■ Typical Characteristics



Package Outline

SOT-89



DIMENSIONS (mm are the original dimensions)

| UNIT | A | b_{p1} | b_{p2} | b_{p3} | c | D | E | e | e_1 | H_E | L_p | w |
|------|------------|--------------|--------------|------------|--------------|------------|------------|-----|-------|--------------|------------|------|
| mm | 1.6 1.4 | 0.48 0.35 | 0.53 0.40 | 1.8 1.4 | 0.44 0.23 | 4.6 4.4 | 2.6 2.4 | 3.0 | 1.5 | 4.25 3.75 | 1.2 0.8 | 0.13 |

Summary of Packing Options

| Package | Package Description | Packing Quantity | Industry Standard |
|---------|---------------------|------------------|-------------------|
| SOT-89 | Tape/Reel, 7" reel | 1000 | EIA-481-1 |

单击下面可查看定价，库存，交付和生命周期等信息

[>>YFW\(佑风微\)](#)