

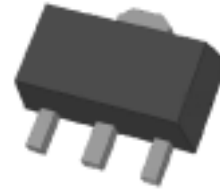


THREE TERMINAL POSITIVE VOLTAGE REGULATORS 9V FH78L09

+9V 三端稳压器 SOT-89

FEATURES

- Best Suited to Power Supply for TTL, C²-MOS
- No External Part Needed
- Built-in Thermal Protective Circuit
- Max. Output Current 100mA (T_j=25)
- SOT-89 Packaged in Power Mini



1.Vout 2.Gnd 3.Vin

MAXIMUM RATINGS(T_a=25) 最大额定值

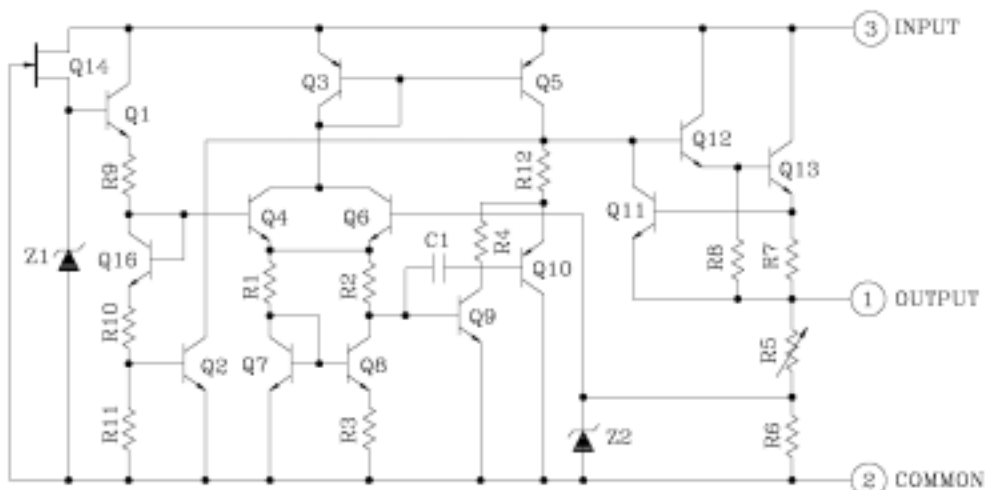
| CHARACTERISTIC 特性参数 | Symbol 符号 | Rating 额定值 | Unit 单位 |
|---|------------------|---------------|------------|
| Input Voltage 输入电压 | V _{IN} | 35 | V |
| Power Dissipation 耗散功率 | P _D | 500 | mW |
| Operating Junction Temperature 结温 | T _j | -20~120 | |
| Operating Temperature 工作温度 | T _{opr} | -20~75 | |
| Storage temperature 储存温度 | T _{stg} | -40~150 | |

DEVICE MARKING 打标

FH78L09 = 8E

EQUIVALENT CIRCUIT

等效电路



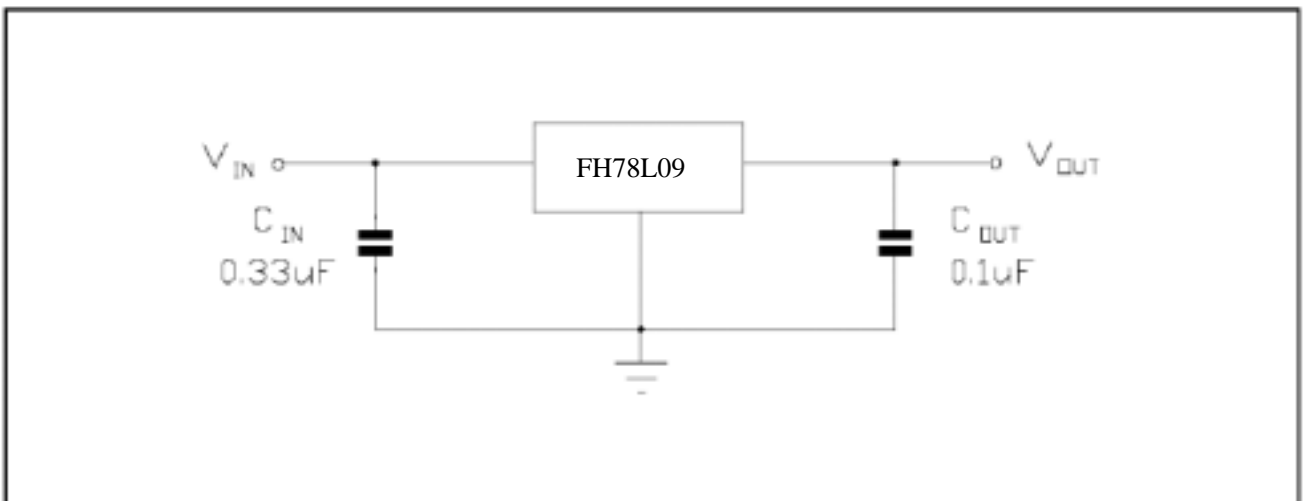


ELECTRICAL CHARACTERISTICS 电特性

(Unless otherwise noted, $V_{IN}=15V, I_{OUT}=40mA, C_{IN}=0.33\mu F, C_{OUT}=0.1\mu F, T_j = 125$)

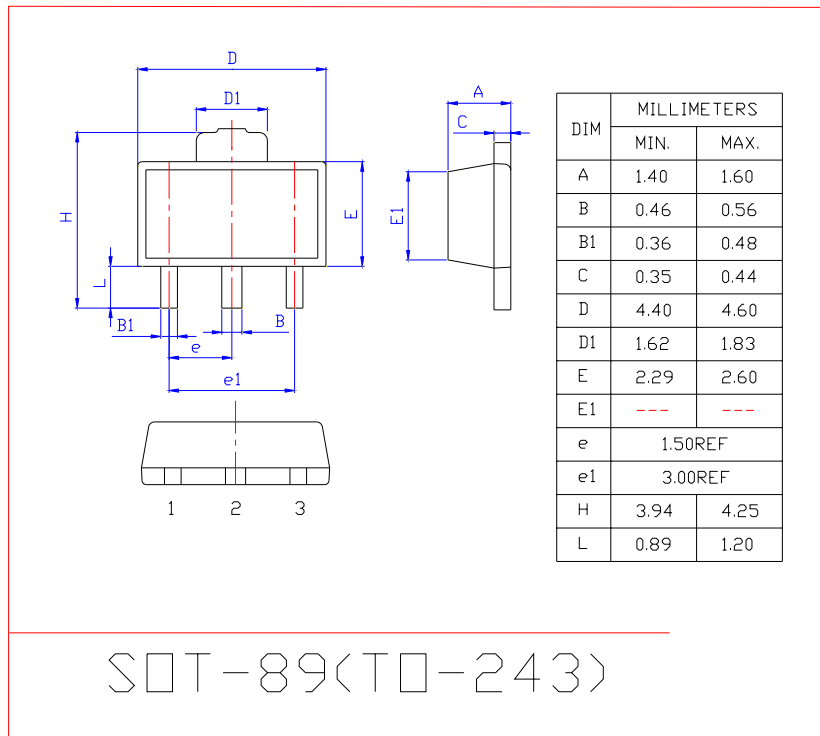
| Characteristic 特性参数 | Symbol 符号 | Test Condition 测试条件 | Min 最小值 | Type 典型值 | Max 最大值 | Unit 单位 | |
|---------------------------------|--------------------|--|-----------------------|----------|---------|---------------|----|
| Output Voltage 输出电压 | V_{OUT} | $T_j=25$ | 8.55 | 9.0 | 9.45 | V | |
| | | 11.5V V_{IN} 23V 1.0mA I_{OUT} 40mA | 8.55 | - | 9.45 | V | |
| | | $V_{IN}=15V, 1.0mA I_{OUT} 70mA$ | 8.55 | - | 9.45 | V | |
| Line Regulation 线性调整率 | Reg line | $T_j=25$ | 11.5V V_{IN} 23V | - | 80 | 225 | mV |
| | | | 12V V_{IN} 23V | - | 20 | 150 | |
| Load Regulation 负载调整率 | Reg load | $T_j=25$ | 1.0mA I_{OUT} 100mA | - | 15 | 80 | mV |
| | | | 1.0mA I_{OUT} 40mA | - | 7 | 40 | |
| Quiescent Current 静态电流 | I_Q | $T_j=25$ | - | 3.1 | 6.5 | mA | |
| | | $T_j=125$ | - | - | 6.0 | | |
| Quiescent Current Change 静态变化电流 | I_Q | 12V V_{IN} 23V 1.0mA I_{OUT} 40mA | - | - | 1.5 | mA | |
| | | | - | - | 0.1 | | |
| Output Noise Voltage 输出噪声电压 | V_{ON} | $T_a=25, 10Hz f 100KHz$ | - | 50 | - | μV_{rms} | |
| Ripple Rejection Ratio 纹波抑制比 | RR | $f=120Hz 12V V_{IN} 23V T_j=25$ | 36 | 44 | - | dB | |
| Dropout Voltage 压降 | $V_{IN} - V_{OUT}$ | $T_j=25$ | - | 1.7 | - | V | |

TEST CIRCUITS





SOT-89 封装外形尺寸 (SOT-89 DIMENSION)



编带包装规格 (SOT-89 TAPE AND REEL SPECIFICATION AND PACKING SPECIFICATION)

