

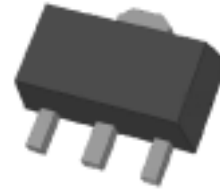


## THREE TERMINAL POSITIVE VOLTAGE REGULATORS 24V FH78L24

### +24V 三端稳压器 SOT-89

#### FEATURES

- Best Suited to Power Supply for TTL, C<sup>2</sup>-MOS
- No External Part Needed
- Built-in Thermal Protective Circuit
- Max. Output Current 100mA (T<sub>j</sub>=25 )
- SOT-89 Packaged in Power Mini



1.Vout 2.Gnd 3.Vin

#### MAXIMUM RATINGS(T<sub>a</sub>=25 ) 最大额定值

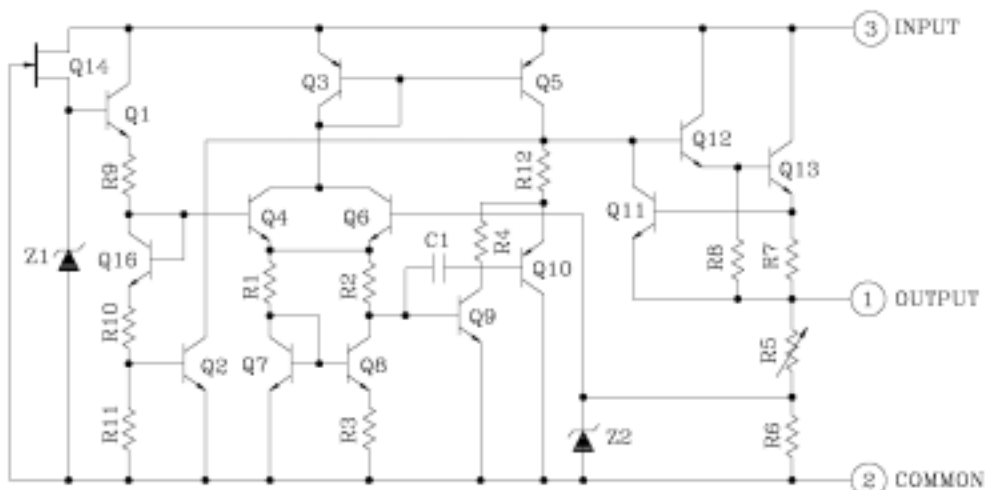
CHARACTERISTIC 特性参数	Symbol 符号	Rating 额定值	Unit 单位
Input Voltage 输入电压	V <sub>IN</sub>	40	V
Power Dissipation 耗散功率	P <sub>D</sub>	500	mW
Operating Junction Temperature 结温	T <sub>j</sub>	-20~120	
Operating Temperature 工作温度	T <sub>opr</sub>	-20~75	
Storage temperature 储存温度	T <sub>stg</sub>	-40~150	

#### DEVICE MARKING 打标

FH78L24 =8L

#### EQUIVALENT CIRCUIT

#### 等效电路



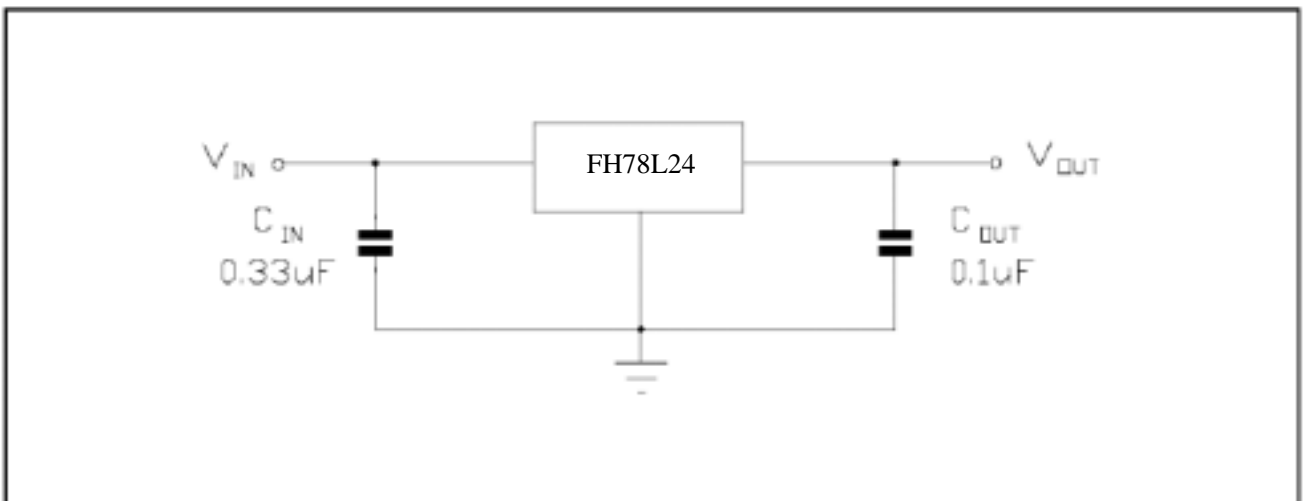


## ELECTRICAL CHARACTERISTICS 电特性

(Unless otherwise specified ,  $V_{IN}=33V$ ,  $I_{OUT}=40mA$ ,  $C_{IN}=0.33\mu F$ ,  $C_{OUT}=0.1\mu F$ ,  $T_j=0$  to  $125$  )

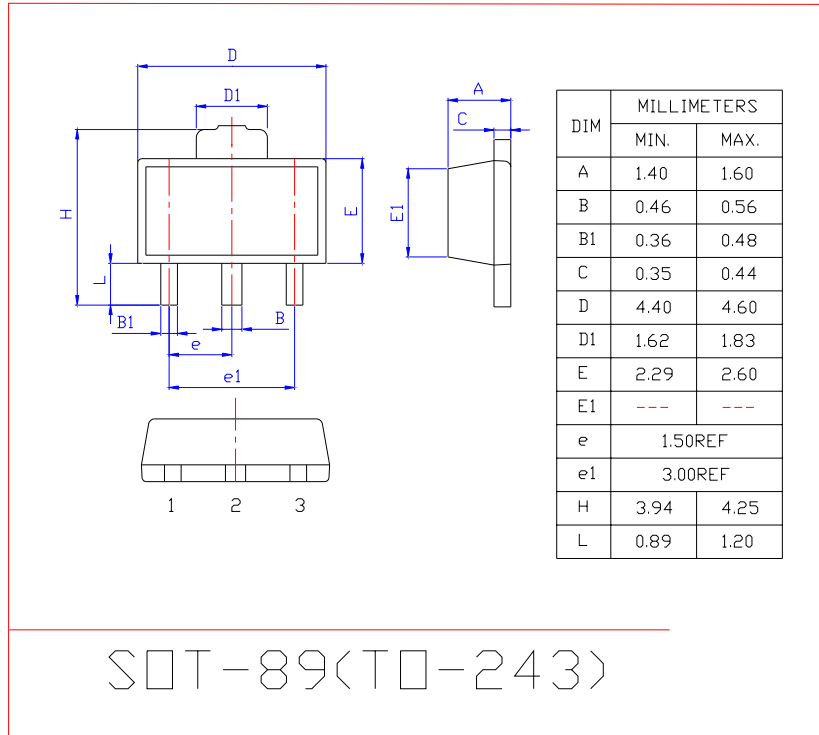
Characteristic 特性参数	Symbol 符号	Test Condition 测试条件	Min 最小值	Type 典型值	Max 最大值	Unit 单位	
Output Voltage 输出电压	$V_{OUT}$	$T_j=25$	22.8	24	25.2	V	
		$27.5V \leq V_{in} \leq 38V$ , $1.0mA \leq I_{out} \leq 40mA$	22.32	-	25.68	V	
		$V_{in}=33V$ , $1.0mA \leq I_{out} \leq 70mA$	22.32	-	25.68	V	
Line Regulation 线性调整率	Reg line	$T_j=25$	$27.5V \leq V_{in} \leq 38V$ ,	-	35	350	mV
			$28V \leq V_{in} \leq 38V$ ,	-	30	300	
Load Regulation 负载调整率	Reg load	$T_j=25$	$1.0mA \leq I_{out} \leq 100mA$	-	40	200	mV
			$1.0mA \leq I_{out} \leq 40mA$	-	20	100	
Quiescent Current 静态电流	$I_Q$	$T_j=25$	-	3.5	6.5	mA	
		$T_j=125$	-	-	6.0		
Quiescent Current Change 静态变化电流	$I_Q$	$28V \leq V_{in} \leq 38V$ , $1.0mA \leq I_{out} \leq 40mA$	-	-	1.5	mA	
			-	-	0.1		
Output Noise Voltage 输出噪声电压	$V_{ON}$	$T_a=25$ , 10Hz f 100KHz	-	200	-	$\mu V_{rms}$	
Ripple Rejection Ratio 纹波抑制比	RR	f=120Hz $29V \leq V_{IN} \leq 39V$ $T_j=25$	31	35	-	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)

