



广东肇庆风华新谷微电子有限公司

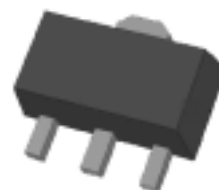
广东省肇庆市风华路 18 号风华电子工业城三号楼一楼
TEL:0758-2865088 2865091 FAX:0758-2849749

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°C)
- SOT-89 Packaged in Power Mini



1.Vout 2.Gnd 3.Vin

MAXIMUM RATINGS(T_a=25°C) 最大额定值

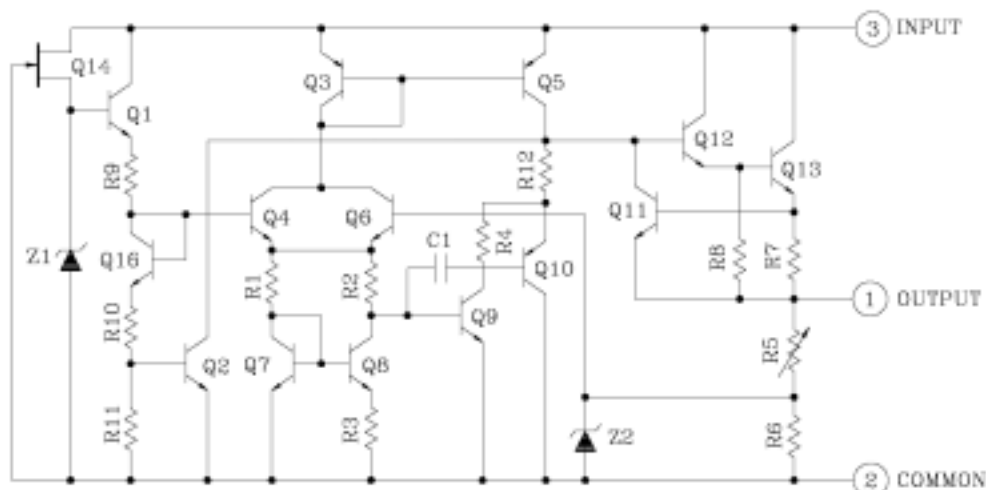
CHARACTERISTIC 特性参数	Symbol 符号	Rating 额定值	Unit 单位
Input Voltage 输入电压	V _{IN}	35	V
Power Dissipation 耗散功率	P _D	500	mW
Operating Junction Temperature 结温	T _j	-20~120	°C
Operating Temperature 工作温度	T _{opr}	-20~75	°C
Storage temperature 储存温度	T _{stg}	-40~150	°C

DEVICE MARKING 打标

FH78L09 = 8E

EQUIVALENT CIRCUIT

等效电路





广东肇庆风华新谷微电子有限公司

广东省肇庆市风华路 18 号风华电子工业城三号楼一楼

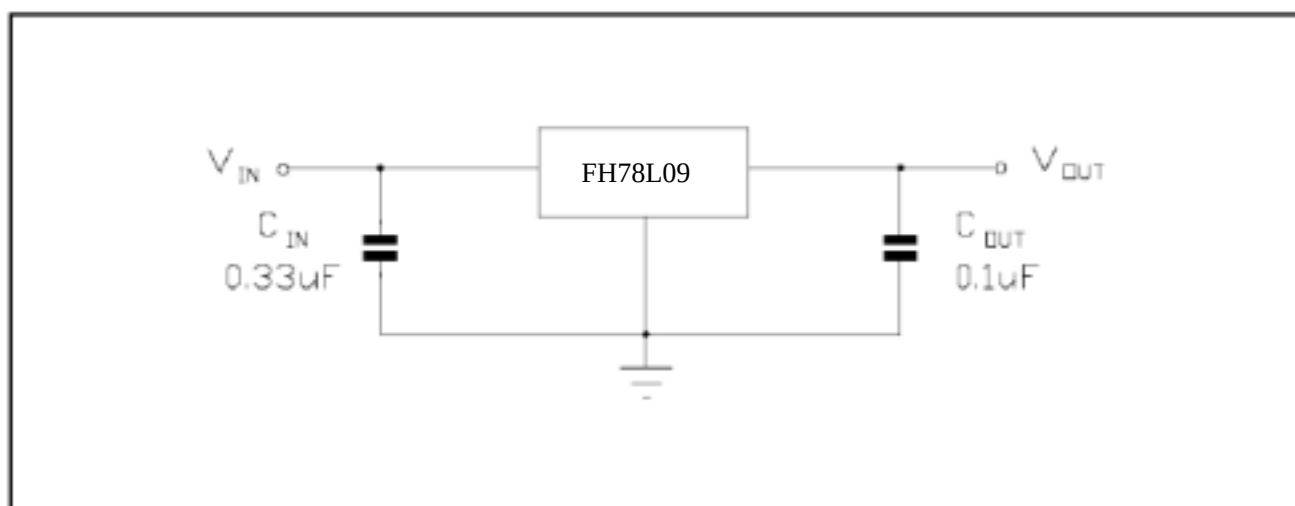
TEL:0758-2865088 2865091 FAX:0758-2849749

ELECTRICAL CHARACTERISTICS 电特性

(Unless otherwise noted, $V_{IN}=15V, I_{OUT}=40mA, C_{IN}=0.33\mu F, C_{OUT}=0.1\mu F, 0^{\circ}C \leq T_j \leq 125^{\circ}C$)

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}	$T_j=25^{\circ}C$		8.55	9.0	9.45	V
		$11.5V \leq V_{IN} \leq 23V$ $1.0mA \leq I_{OUT} \leq 40mA$		8.55	-	9.45	V
		$V_{IN}=15V, 1.0mA \leq I_{OUT} \leq 70mA$		8.55	-	9.45	
Line Regulation 线性调整率	Reg line	$T_j=25^{\circ}C$	$11.5V \leq V_{IN} \leq 23V$	-	80	225	mV
			$12V \leq V_{IN} \leq 23V$	-	20	150	
Load Regulation 负载调整率	Reg load	$T_j=25^{\circ}C$	$1.0mA \leq I_{OUT} \leq 100mA$	-	15	80	mV
			$1.0mA \leq I_{OUT} \leq 40mA$	-	7	40	
Quiescent Current 静态电流	I_Q	$T_j=25^{\circ}C$		-	3.1	6.5	mA
		$T_j=125^{\circ}C$		-	-	6.0	
Quiescent Current Change 静态变化电流	ΔI_Q	$12V \leq V_{IN} \leq 23V$		-	-	1.5	mA
		$1.0mA \leq I_{OUT} \leq 40mA$		-	-	0.1	
Output Noise Voltage 输出噪声电压	V_{ON}	$T_a=25^{\circ}C, 10Hz \leq f \leq 100KHz$		-	50	-	μV_{rms}
Ripple Rejection Ratio 纹波抑制比	RR	$f=120Hz, 12V \leq V_{IN} \leq 23V, T_j=25^{\circ}C$		36	44	-	dB
Dropout Voltage 压降	$ V_{IN} - V_{OUT} $	$T_j=25^{\circ}C$		-	1.7	-	V

TEST CIRCUITS



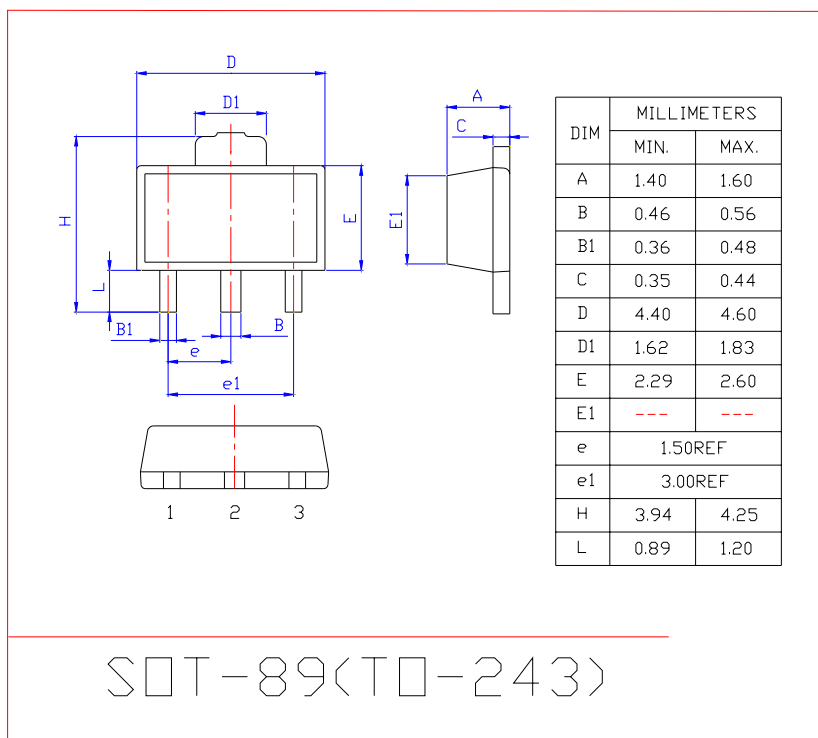


广东肇庆风华新谷微电子有限公司

广东省肇庆市风华路 18 号风华电子工业城三号楼一楼

TEL:0758-2865088 2865091 FAX:0758-2849749

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)

