■ 产品简介

AMS1117 是一款低压差的线性稳压器。

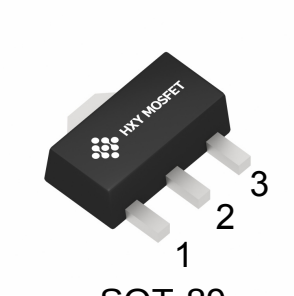
■ 产品特点

- 包括三端可调输出和固定电压输出版本（固定电压包括 1.2V,1.8V，2.5V，3.3V，5.0V等，其他电压规格可根据用户定制）
- 最大输出电流为 1A
- 输出电压精度高达±2%
- 稳定工作电压范围为高达 12V
- 电压线性度为 0.2%
- 负载线性度为 0.4%
- 环境温度：T_A 的范围是 0℃~125℃

■ 产品用途

- 计算机主板、显卡
- LCD 监视器及 LCD TV
- DVD 解码板
- ADSL 等设备
- 开关电源的后级稳压

■ 封装形式和管脚定义功能



SOT-89

引脚定义：

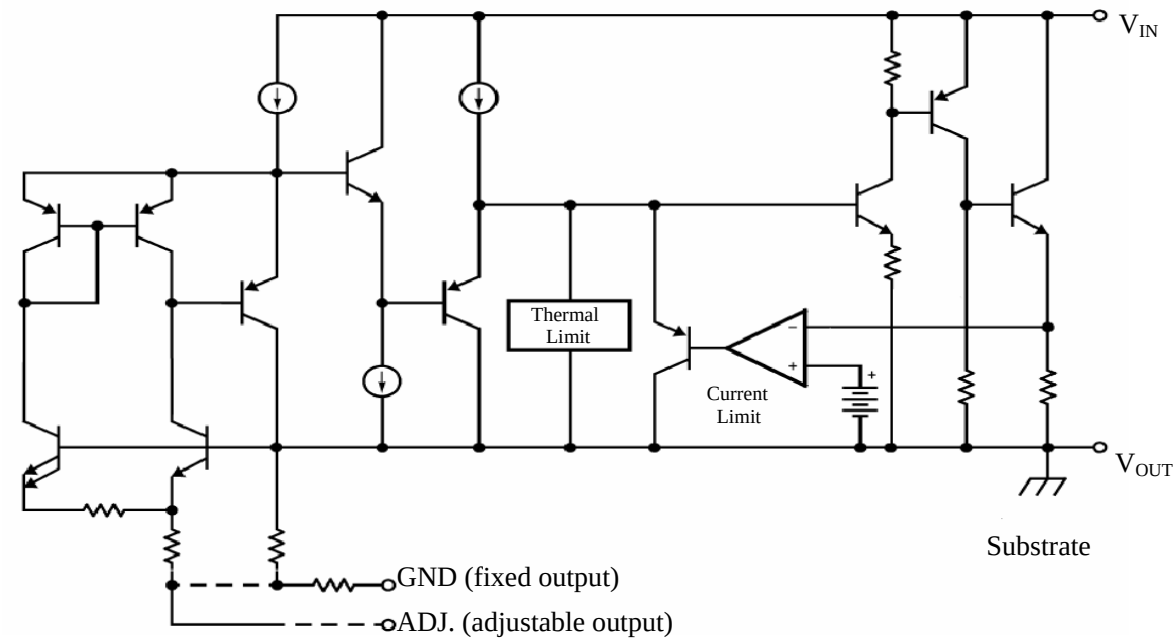
引脚号	符号	定义
1	GND	接地脚
2	Vout	输出端
3	Vin	输入端

固定电压型

引脚号	符号	定义
1	Adj.	可调端
2	Vout	输出端
3	Vin	输入端

可调电压型

■ 功能框图



■ 极限参数

参 数 名 称	符 号	数 值	单位
最大输入电压	Vin	18	V
最大节温	TJ	125	°C
最大环境温度	TA	125	°C
贮存温度	Ts	-65~ +150	°C
焊接温度和时间		300°C,10S	

■ 推荐工作条件：

名称	最小	推荐	最大	单位
输入电压范围			15	V
工作环境温度	0		125	°C

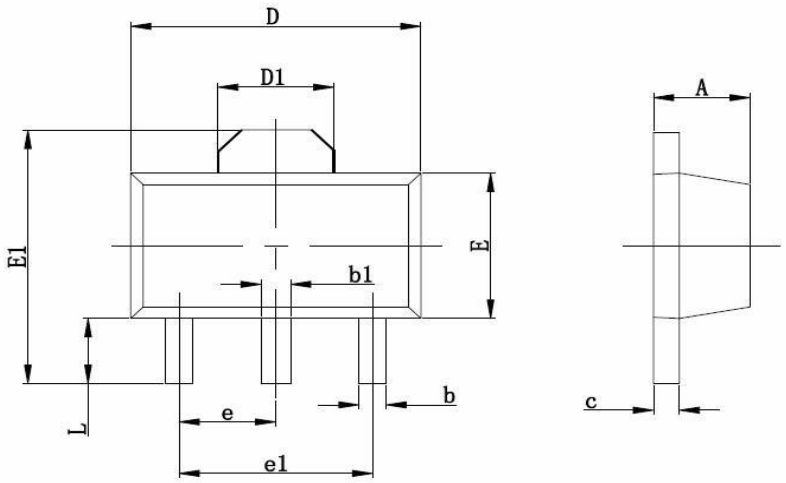
■ 主要参数和工作特性：

参数	参数说明	条件	最小值	典型值	最大值	单位
Vref	参考电压	Iout=10mA, Vin-Vout=2V 10mA≤Iout≤1A ,1.5V≤Vin-Vout≤10V	1.225	1.25	1.275	V
Vout	输出电压	AMS1117-1.5 10mA≤Iout≤1A ,3.0V≤Vin≤10V	1.470	1.5	1.530	V
		AMS1117-1.8 10mA≤Iout≤1A ,3.25V≤Vin≤10V	1.764	1.80	1.836	V
		AMS1117-2.5 10mA≤Iout≤1A ,3.9 V≤Vin≤10V	2.45	2.50	2.55	V
		AMS1117-3.3 10mA≤Iout≤1A , 5.3 V≤Vin≤12V	3.235	3.3	3.365	V
		AMS1117-5 10mA≤Iout≤1A , 6.5V≤Vin≤12V	4.9	5	5.1	V
ΔVout	电压线性度	AMS1117-ADJ Iout=10mA, V≤Vin-Vout≤10V		5	18	mV
		AMS1117-1.5 Iout=10mA, 2.75V≤Vin≤10V		5	18	mV
		AMS1117-1.8 Iout=10mA, 3.25V≤Vin≤10V		5	18	mV
		AMS1117-2.5 Iout=10mA, 3.9V≤Vin≤10V		5	18	mV
		AMS1117-3.3 Iout=10mA, 5.3 V≤Vin≤12V		9	18	mV
		AMS1117-5 Iout=10mA,6.5V≤Vin≤12V		9	18	mV
ΔVout	负载线性度	AMS1117-ADJ Vin＝3.25V, 10mA≤Iout≤1A		9	18	mV
		AMS1117-1.5 Vin＝3.25V, 10mA≤Iout≤1A		9	18	mV

■ 主要参数和工作特性：

		AMS1117-1.8 Vin＝3.25V, 10mA≤Iout≤1A		10	18	mV
		AMS1117-2.5 Vin＝4.5 V, 10mA≤Iout≤1A		10	18	mV
		AMS1117-3.3 Vin=5.3V, 0≤Iout≤1A		12	20	mV
		AMS1117-5 Vin=6.5V, 0≤Iout≤1A		12	20	mV
Vin-Vout	最小输入输出电压差	ΔVout, ΔVref,=1%，Iout=1A			1.4	V
Ilimit	最小负载电流	AMS1117-ADJ			10	mA
Iq	静态电流	AMS1117-ADJ Vin＝4.0V			12	mA
		AMS1117-1.5,Vin＝4.8V			12	mA
		AMS1117-1.8,Vin＝4.8V			12	mA
		AMS1117-2.5,Vin＝4.8V			12	mA
		AMS1117-3.3,Vin＝4.8V			12	mA
		AMS1117-5.0,Vin＝4.8V			12	mA

SOT-89 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.400	1.600	0.055	0.063
b	0.350	0.520	0.013	0.197
b1	0.400	0.580	0.016	0.023
c	0.350	0.440	0.014	0.017
D	4.400	4.600	0.173	0.181
D1	1.550 REF		0.061 REF	
E	2.350	2.550	0.091	0.102
E1	3.940	4.250	0.155	0.167
e	1.500 TYP		0.060TYP	
e1	3.000 TYP		0.118TYP	
L	0.900	1.100	0.035	0.047

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