



■ 产品简介

HXY1117 是一款低压差的线性稳压器。

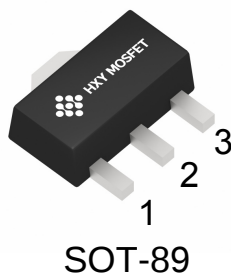
■ 产品特点

- 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 $\pm 2\%$
- 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°C~125°C

■ 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



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

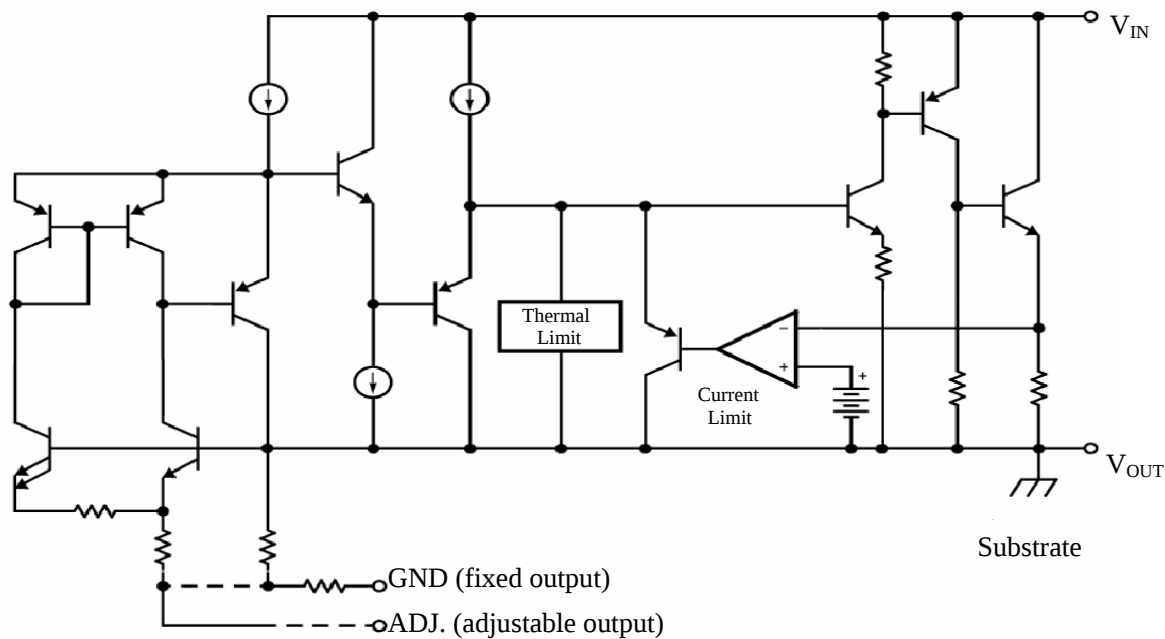
固定电
压型

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
最大结温	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:

Parameter Name	Symbol	Test Conditions	Min	Typ	Max	Unit
Reference Voltage	Vref	I _{out} =10mA, V _{in} -V _{out} =2V 10mA≤I _{out} ≤1A, 1.4V≤V _{in} -V _{out} ≤12V	1.231 1.225	1.250 1.250	1.269 1.275	V
Output Voltage	Vout	HXY1117-1.2 I _{out} = 10mA, V _{in} =3.2V 0≤I _{out} ≤1.0A, 3.0V≤V _{in} ≤12V	1.182 1.176	1.200 1.200	1.218 1.224	V
		HXY1117-1.5 I _{out} = 10mA, V _{in} =3.5V 0≤I _{out} ≤1.0A, 3.0V≤V _{in} ≤12V	1.477 1.470	1.500 1.500	1.523 1.530	V
		HXY1117-1.8 I _{out} = 10mA, V _{in} =3.8V 0≤I _{out} ≤1.0A, 3.2V≤V _{in} ≤12V	1.773 1.764	1.800 1.800	1.827 1.836	V
		HXY1117-2.5 I _{out} = 10mA, V _{in} =4.5V 0≤I _{out} ≤1.0A, 3.9V≤V _{in} ≤12V	2.463 2.450	2.500 2.500	2.537 2.550	V
		HXY1117-2.85 I _{out} =10mA, V _{in} =4.85V 0≤I _{out} ≤1.0A, 4.25V≤V _{in} ≤12V	2.807 2.793	2.85 2.85	2.893 2.907	V
		HXY1117-3.3 I _{out} = 10mA, V _{in} =5V 0≤I _{out} ≤1.0A, 4.75V≤V _{in} ≤12V	3.250 3.234	3.300 3.300	3.350 3.366	V
		HXY1117-5.0 I _{out} = 10mA, V _{in} =7V 0≤I _{out} ≤1.0A, 6.5V≤V _{in} ≤12V	4.925 4.900	5.000 5.000	5.075 5.100	V
Line Regulation (Note1)	LNR	HXY1117-ADJ I _{out} = 10mA, 1.4V≤V _{in} -V _{out} ≤10.75V		0.035	0.2	%
		HXY1117 Fixed Version I _{out} = 10mA, V _{out} +1.4V≤V _{in} ≤12V		4	12	mV
Load Regulation (Note1,2)	LDR	HXY1117-ADJ V _{in} -V _{out} =3V, 10mA≤I _{out} ≤1.0A		0.2	0.4	%
		HXY1117 Fixed Version V _{in} =V _{out} +1.4V, 0≤I _{out} ≤1.0A		6	12	mV
Dropout Voltage (Note3)	V _{in} -V _{out}	ΔV _{out} , ΔV _{ref} = 1%, I _{out} = 100mA		1.0	1.2	V
		ΔV _{out} , ΔV _{ref} = 1%, I _{out} =500mA		1.05	1.25	V
		ΔV _{out} , ΔV _{ref} = 1%, I _{out} = 1.0A		1.1	1.3	V
Current Limit	I _{limit}	V _{in} -V _{out} =2V, T _j =25℃	1.0	1.4		A
Minimum Load Current (Note4)				5	10	mA
Quiescent Current	I _q	HXY1117 Fixed Version, V _{in} -V _{out} = 1.25V		4	8	mA
Adjust Pin Current	I _{adj}	Adjustable Version		55	120	μA
Adjust Pin Current Change	I _{change}			0.2	5	μA
Temperature Stability	T _s				0.5	%



Typical Characteristics

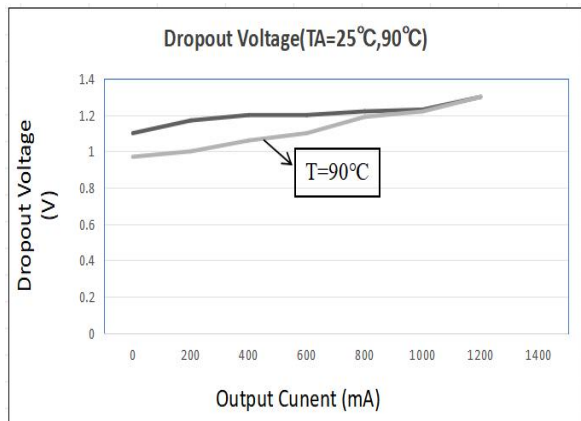


Figure 1. Dropout Voltage

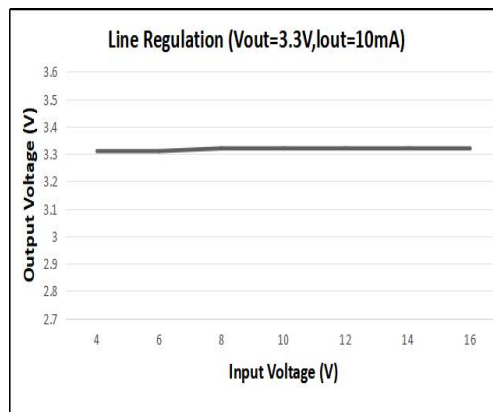


Figure2 . Line Regulation

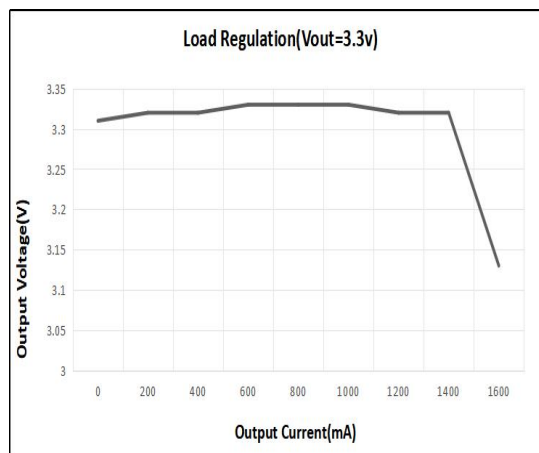
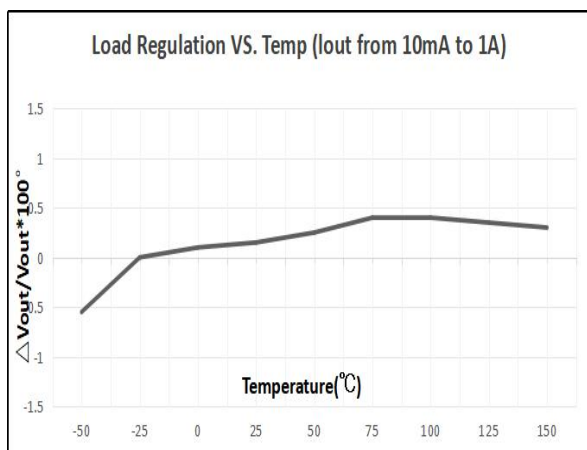


Figure 3. Load Regulation

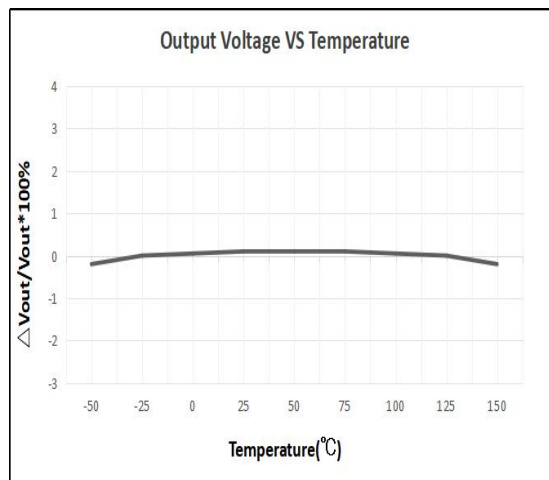
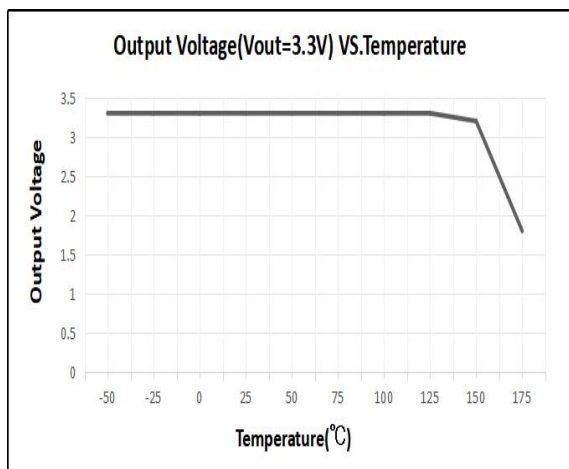


Figure 4. Temperature Stability

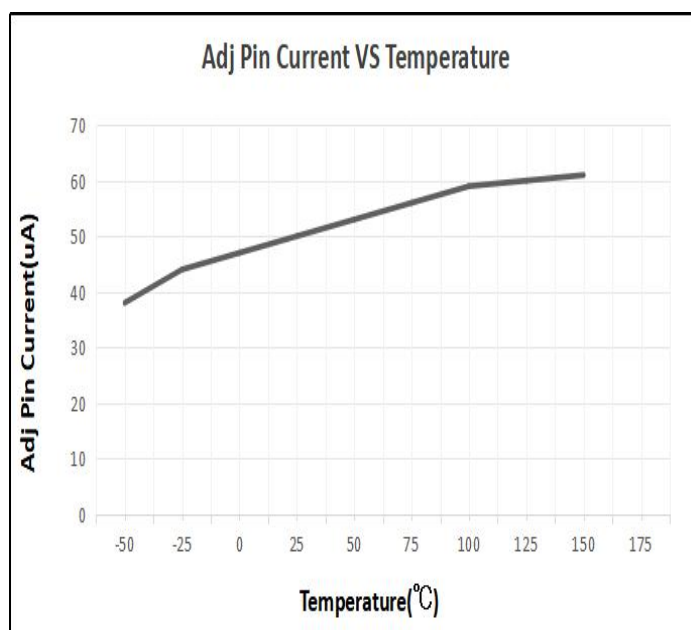
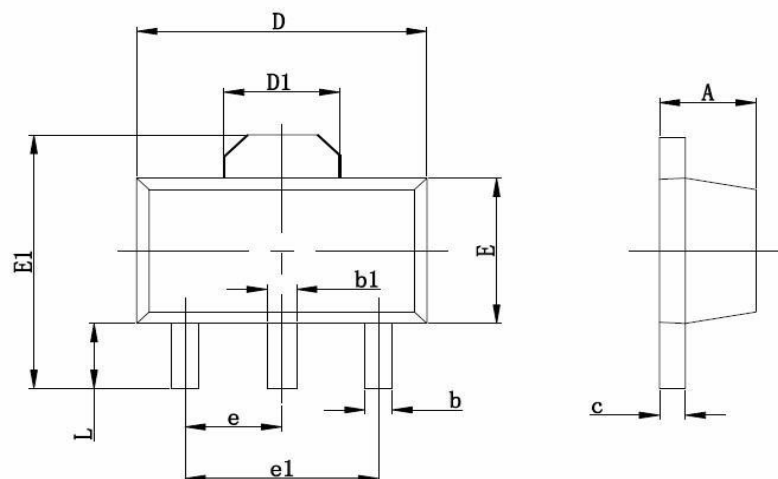


Figure 5. Adj Pin Current VS.Temperature



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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