■ 产品简介

HXY1117 是一款低压差的线性稳压器。

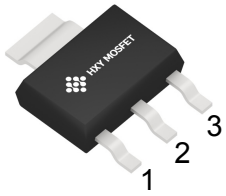
■ 产品特点

- 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,1.5V，1.8V，2.5V，2.85V 3.3V，5V 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±1.5%
- 稳定工作电压范围为高达 15V
- 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-223

引脚定义：

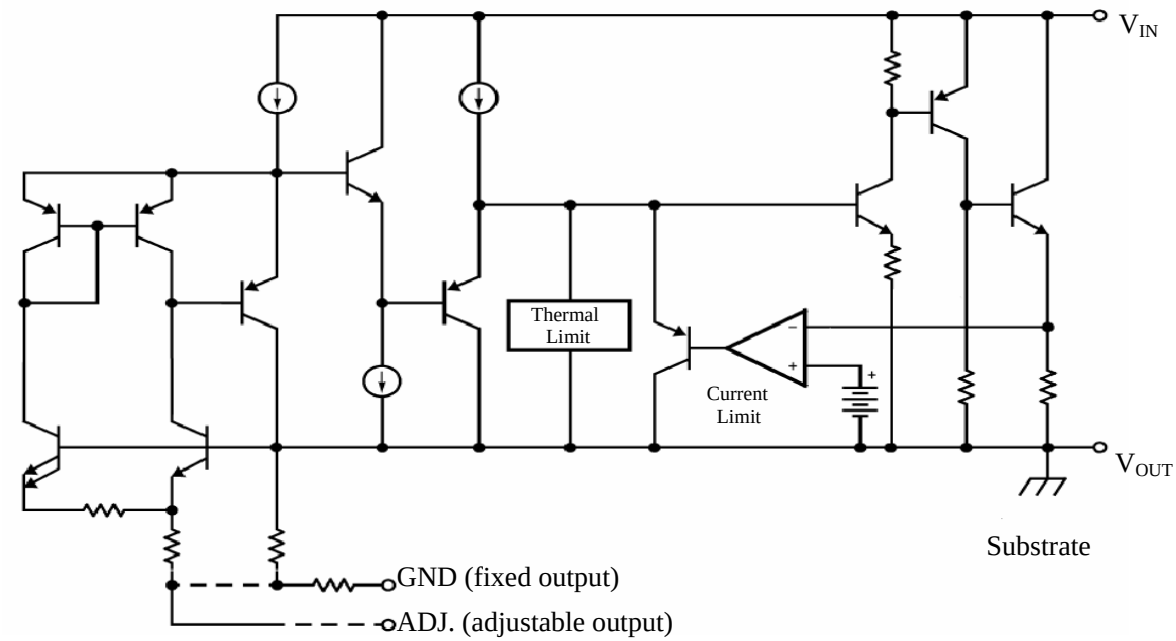
引脚号	符号	定义
1	GND	接地脚
2	Vout	输出端
3	Vin	输入端

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	150	°C
最大环境温度	TA	140	°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	-40		125	°C

■ 主要参数和工作特性：

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

Typical Characteristics

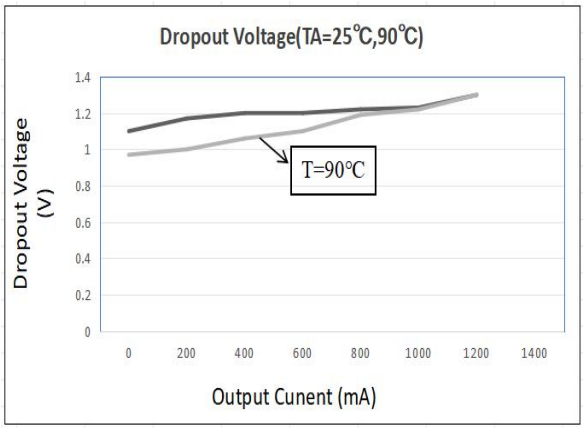


Figure 1. Dropout Voltage

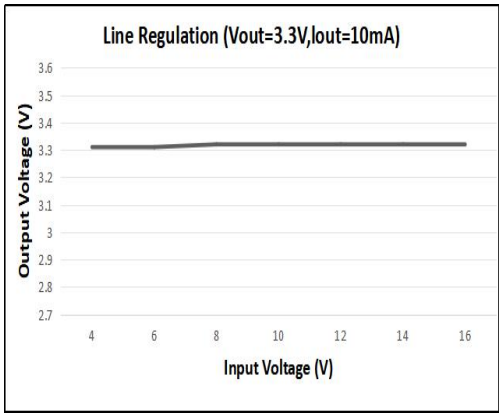
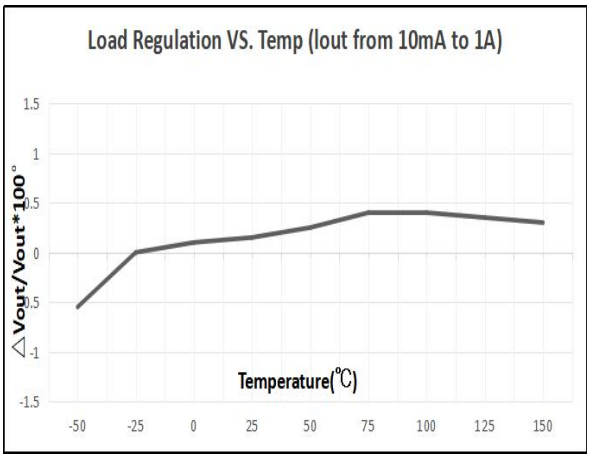


Figure2 . Line Regulation



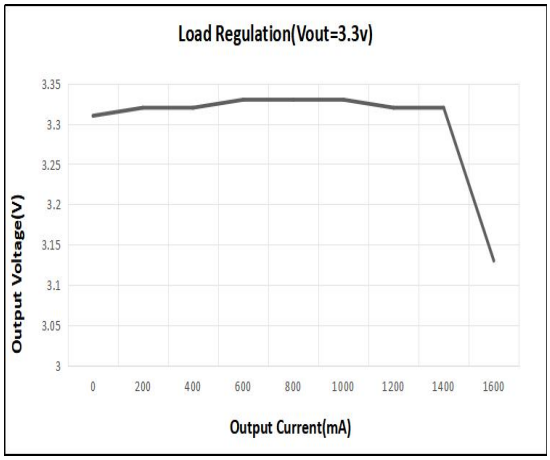
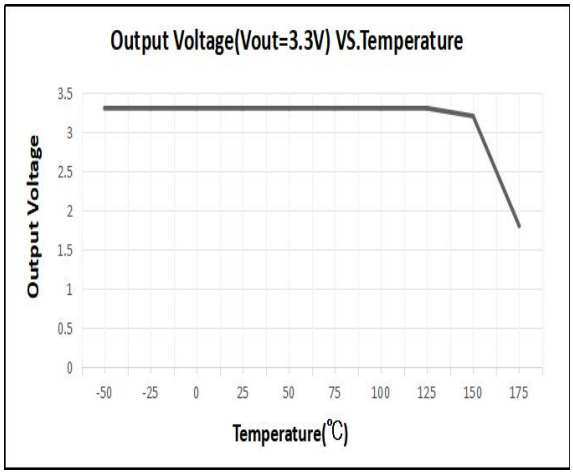


Figure 3. Load Regulation



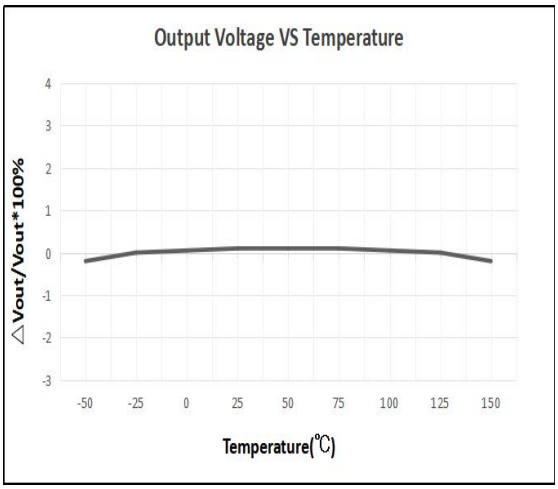


Figure 4. Temperature Stability

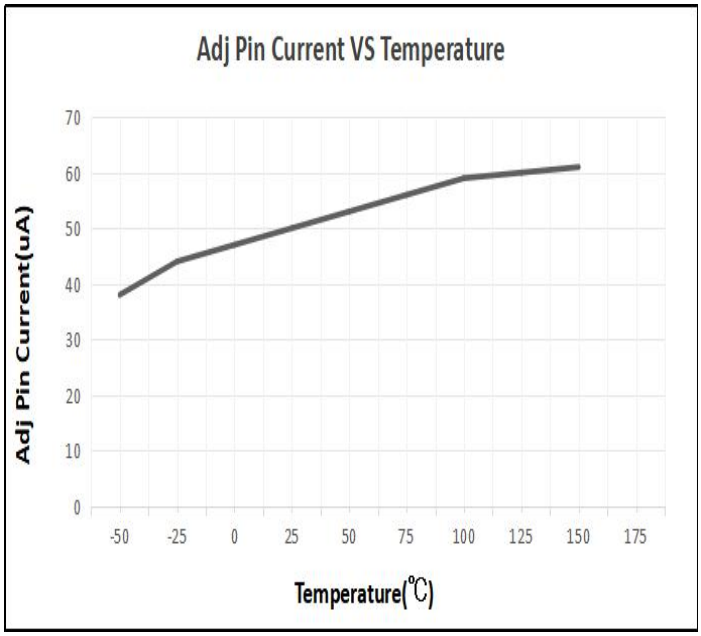
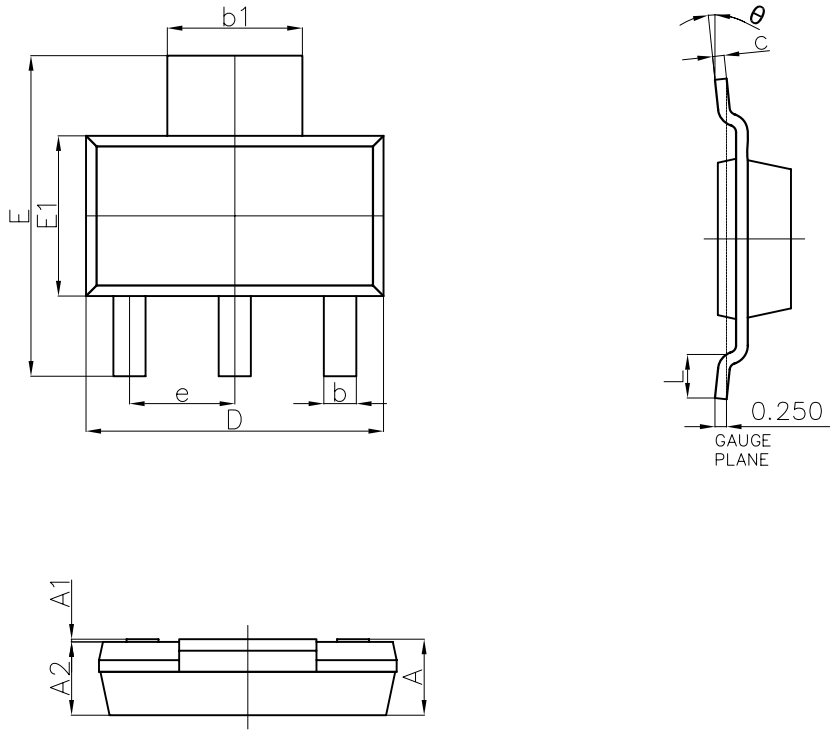


Figure 5. Adj Pin Current VS.Temperature

SOT-223 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	——	1.800	——	0.071
A1	0.020	0.100	0.001	0.004
A2	1.500	1.700	0.059	0.067
b	0.660	0.840	0.026	0.033
b1	2.900	3.100	0.114	0.122
c	0.230	0.350	0.009	0.014
D	6.300	6.700	0.248	0.264
E	6.700	7.300	0.264	0.287
E1	3.300	3.700	0.130	0.146
e	2.300(BSC)		0.091(BSC)	
L	0.750	——	0.030	——
θ	0°	10°	0°	10°

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