

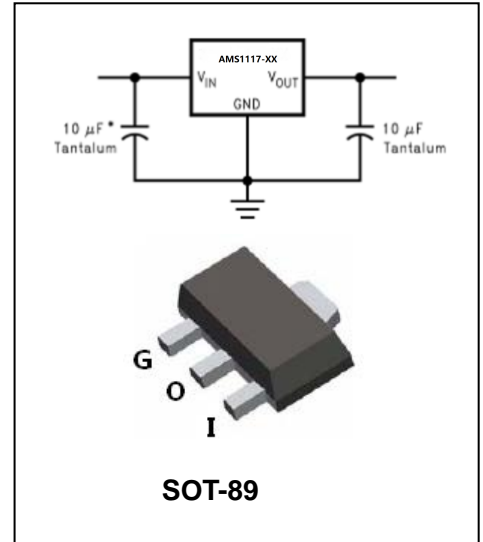


Features:

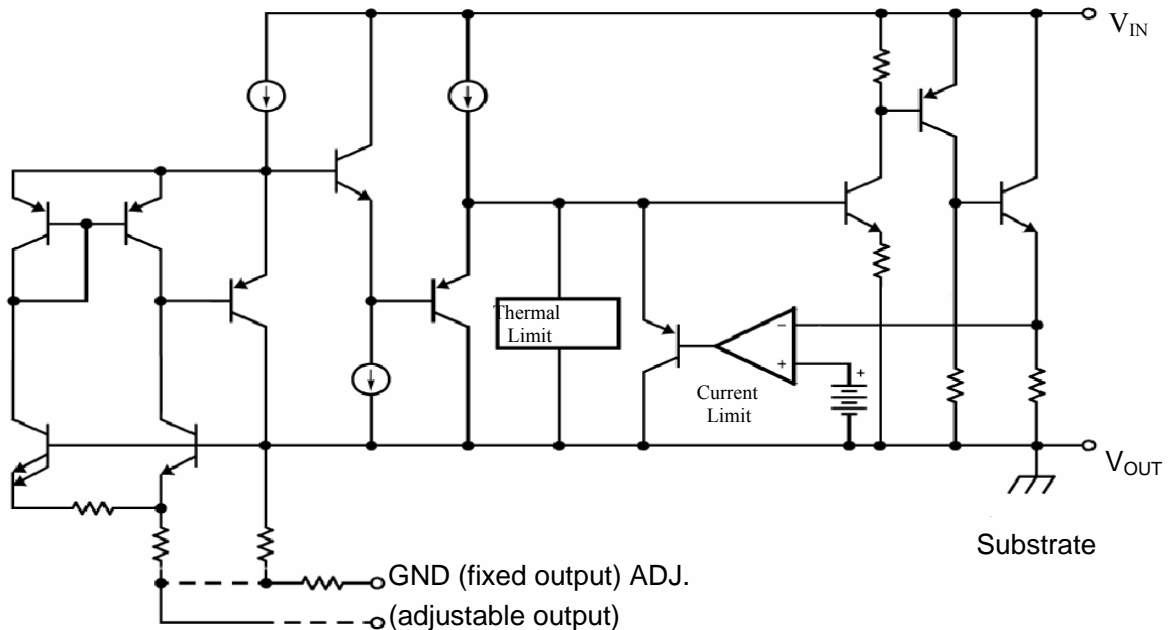
- Including three-terminal adjustable voltage output and fixed voltage output version (fixed voltage includes: 1.2V, 1.8V, 2.5V, 3.3V, 5V, etc., other specifications can be customized according to users)
- Maximum output current: 1.0A
- Output voltage accuracy: $\pm 2\%$
- Line regulation: 0.2%
- Load regulation: 0.4%
- Ambient temperature T_A range: 0~125°C

Applications:

- PC motherboard, graphics card
- LCD monitor, LCD TV
- DVD-video Player
- ADSL Modem
- Post-stage regulation of switching power supply

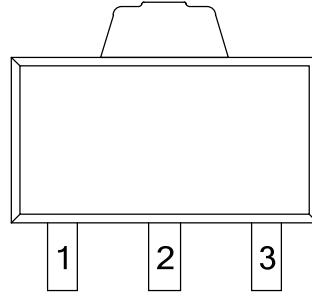


Typical Application:





Pin Assignments:



Pin definition:

Fixed Voltage

Pin	Symbol	Definition
1	GND	Ground pin
2	Vout	Output
3	Vin	Input

Adjustable Voltage

Pin	Symbol	Definition
1	Adj.	Adjust pin
2	Vout	Output
3	Vin	Input

Absolute Maximum Rating(Ta=25°C unless otherwise noted):

Parameter	Symbol	Value	Units
Maximum	Vin	18	V
Maximum junction Temperature	T _J	125	°C
Maximum ambient Temperature	T _A	125	°C
Storage Temperature	T _S	-65~ +150	°C
Soldering Temperature and time		300°C,10S	

Recommended Operating Conditions:

Parameter	Minimum	Type	Maximum	Units
Input Voltage			15	V
Operating Junction Temperature	0		125	°C



Electrical characteristics(Ta=25°C unless otherwise specified):

Symbol	Parameter	Test Conditions	Minimum	Type	Maximum	Units
Vref	Reference Voltage	I _{out} =10mA, V _{in} -V _{out} =2V 10mA ≤ I _{out} ≤ 1A, 1.5V ≤ V _{in} -V _{out} ≤ 10V	1.225	1.25	1.275	V
Vout	Output Voltage	AMS1117-1.50V 10mA ≤ I _{out} ≤ 1A, 3.0V ≤ V _{in} ≤ 10V	1.470	1.5	1.530	V
		AMS1117-1.80V 10mA ≤ I _{out} ≤ 1A, 3.25V ≤ V _{in} ≤ 10V	1.764	1.80	1.836	V
		AMS1117-2.50V 10mA ≤ I _{out} ≤ 1A, 3.9V ≤ V _{in} ≤ 10V	2.45	2.50	2.55	V
		AMS1117-3.3V 10mA ≤ I _{out} ≤ 1A, 5.3V ≤ V _{in} ≤ 12V	3.235	3.3	3.365	V
		AMS1117-5V 10mA ≤ I _{out} ≤ 1A, 6.5V ≤ V _{in} ≤ 12V	4.9	5	5.1	V
ΔVout	Line Regulation	AMS1117-ADJ I _{out} =10mA, V ≤ V _{in} -V _{out} ≤ 10V			18	mV
		AMS1117-1.5V I _{out} =10mA, 2.75V ≤ V _{in} ≤ 10V				mV
		AMS1117-1.8V I _{out} =10mA, 3.25V ≤ V _{in} ≤ 10V				mV
		AMS1117-2.50V I _{out} =10mA, 3.9V ≤ V _{in} ≤ 10V				mV
		AMS1117-3.3V I _{out} =10mA, 5.3V ≤ V _{in} ≤ 12V				mV
		AMS1117-5V I _{out} =10mA, 6.5V ≤ V _{in} ≤ 12V				mV
ΔVout	Load Regulation	AMS1117-ADJ V _{in} = 3.25V, 10mA ≤ I _{out} ≤ 1A				mV
		AMS1117-1.5V V _{in} = 3.25V, 10mA ≤ I _{out} ≤ 1A				mV



Electrical characteristics(Ta=25°C unless otherwise specified):

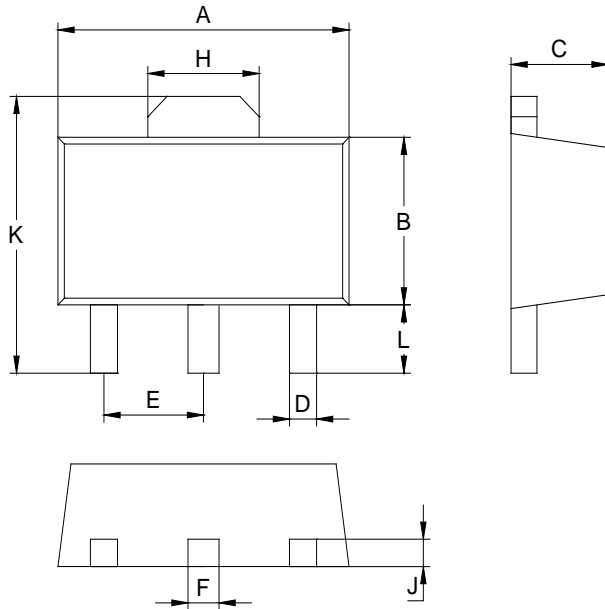
		AMS1117-1.8V Vin = 3.25V, 10mA ≤ Iout ≤ 1A			18	mV
		AMS1117-2.5V Vin = 4.5 V, 10mA ≤ Iout ≤ 1A			18	mV
		AMS1117-3.3V Vin=5.3V, 0 ≤ Iout ≤ 1A			20	mV
		AMS1117-5V Vin=6.5V, 0 ≤ Iout ≤ 1A			20	mV
Vin-Vout	Minimum Dropout Voltage	ΔVout, ΔVref,=1%, Iout=1A			1.4	V
Ilimit	Current limit	AMS1117-ADJ			10	mA
Iq	Quiescent Current	AMS1117-ADJ Vin = 4.0V			12	mA
		AMS1117-1.5V, Vin = 4.8V			12	mA
		AMS1117-1.8V, Vin = 4.8V			12	mA
		AMS1117-2.5V, Vin = 4.8V			12	mA
		AMS1117-3.3V, Vin = 4.8V			12	mA
		AMS1117-5.0V, Vin = 4.8V			12	mA



PACKAGE OUTLINE

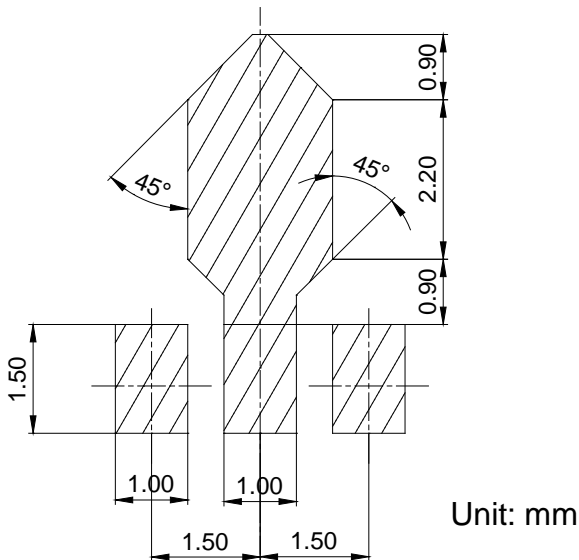
Plastic surface mounted package

SOT-89



SOT-89		
Dim	Min	Max
A	4.30	4.70
B	2.25	2.65
C	1.30	1.70
D	0.30	0.50
E	1.40	1.60
F	0.38	0.58
H	1.60	1.80
J	0.30	0.50
L	0.90	1.10
K	3.95	4.35
All Dimensions in mm		

SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
AMS1117-XX	SOT-89	1000pcs / Tape & Reel