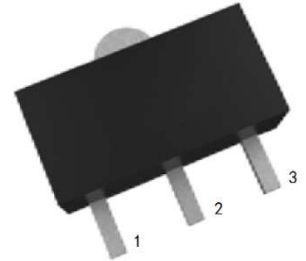


## 3-Terminal Positive Voltage Regulator

### FEATURE

- Maximum output current of 200mA
- Output voltage of 3.3V
- Thermal overload protection
- Short circuit current limiting



1: OUT 2: GND 3: IN  
SOT-89 PLASTIC PACKAGE

### ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

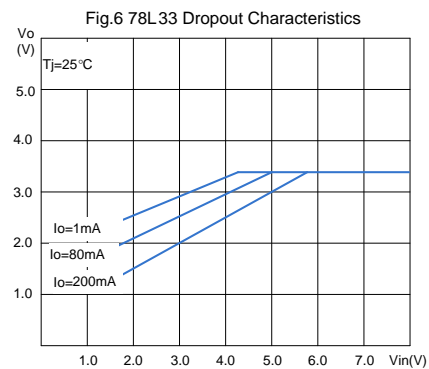
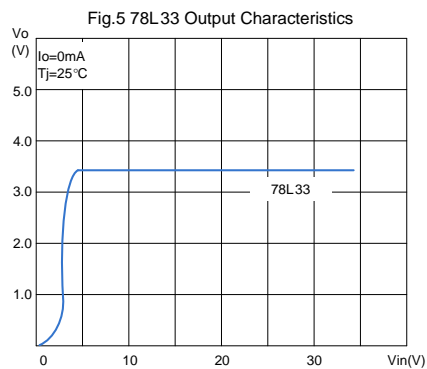
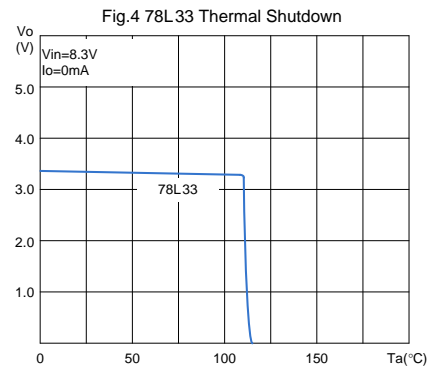
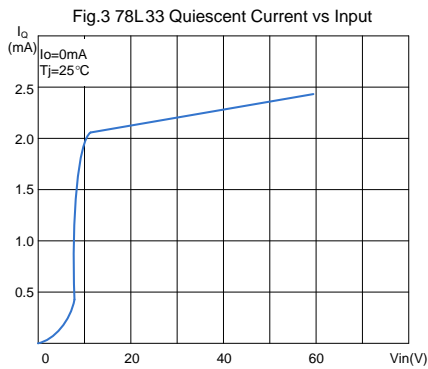
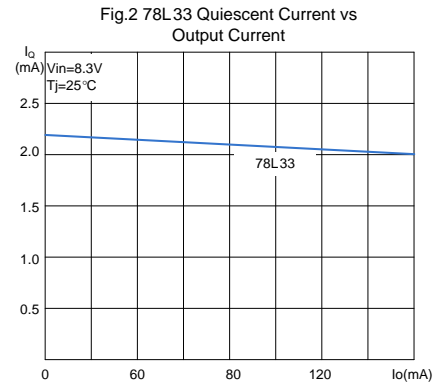
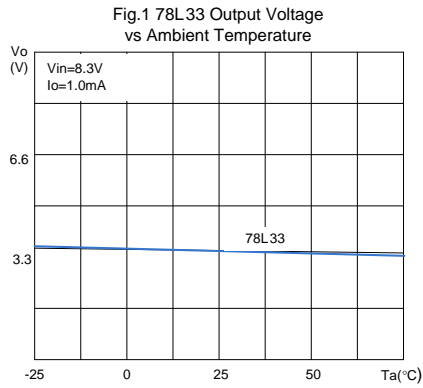
CHARACTERISTICS	SYMBOL	VALUE	UNITS
Input voltage	V <sub>IN</sub>	30	V
Output Current	I <sub>OUT</sub>	200	mA
Junction Temperature	T <sub>J</sub>	+125	°C
Operating Temperature	T <sub>OPR</sub>	-20~+120	°C
Storage Temperature Range	T <sub>STG</sub>	-40~+150	°C

### ELECTRICAL CHARACTERISTICS

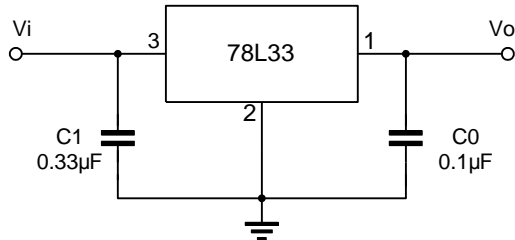
(V<sub>I</sub>=8.3V, I<sub>o</sub>=80mA, 0<T<sub>j</sub><125°C, C<sub>1</sub>=0.33μF, C<sub>o</sub>=0.1μF, unless otherwise specified)(Note 1)

Characteristic	Symbol	Test conditions	MIN	TYP	MAX	UNI
Output Voltage	V <sub>O</sub>	T <sub>j</sub> =25°C	3.168	3.3	3.432	V
		5.3V≤V <sub>I</sub> ≤20V, I <sub>O</sub> =1mA~80mA	3.135		3.465	V
		I <sub>O</sub> =1mA~140mA	3.135		3.465	V (note 2)
Load Regulation	ΔV <sub>o</sub>	T <sub>j</sub> =25°C, I <sub>O</sub> =1mA~200mA		10	60	mV
		T <sub>j</sub> =25°C, I <sub>O</sub> =1mA~80mA		7	30	mV
Line regulation	ΔV <sub>o</sub>	5.3V≤V <sub>I</sub> ≤20V, T <sub>j</sub> =25°C		7	150	mV
		6.3V≤V <sub>I</sub> ≤20V, T <sub>j</sub> =25°C		4	100	mV
Quiescent Current	I <sub>q</sub>	T <sub>j</sub> =25°C		2.0	5.5	mA
Quiescent Current Change	ΔI <sub>q</sub>	6.3V≤V <sub>I</sub> ≤20V			1.5	mA
	ΔI <sub>q</sub>	1mA≤I <sub>O</sub> ≤80mA			0.1	mA
Output Noise Voltage	V <sub>N</sub>	10Hz≤f≤100kHz, T <sub>j</sub> =25°C		40		μV
Temperature coefficient of V <sub>o</sub>	ΔV <sub>o</sub> /ΔT	I <sub>o</sub> =5mA		0.45		mV/°C
Ripple Rejection	RR	6.3V≤V <sub>I</sub> ≤16.3V, f=120Hz, T <sub>j</sub> =25°C	40	49		dB
Dropout Voltage	V <sub>d</sub>			1.7		V

## TYPICAL PERFORMANCE CHARACTERISTICS



## TYPICAL APPLICATION

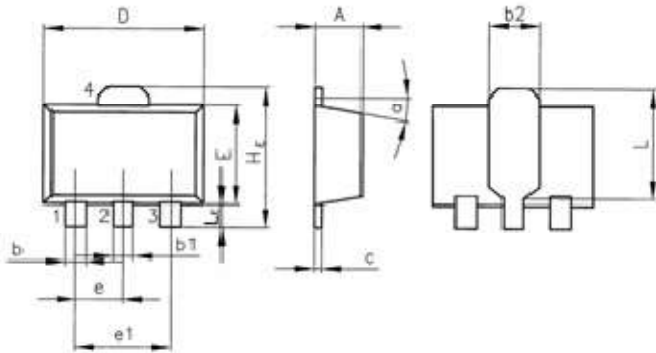


Note 1: The Maximum steady state usable output current and input voltage are very dependent on the heating sinking and/or lead temperature length of the package. The data above represent pulse test conditions with junction temperatures as indicated at the initiation of test.

Note 2: Power dissipation <math>P\_D</math>.

## Outline Dimension

Unit: mm



SOT-89			
Symbol	min	typ	max
A	1.4	---	1.6
b	0.35	---	0.55
b1	0.4	---	0.65
b2	---	1.6	---
c	0.35	---	0.45
D	4.4	---	4.6
E	2.35	---	2.55
e	---	1.5	---
e1	---	3	---
HE	---	4.15	---
L	---	2.7	---
LE	---	1.0	---
$\alpha$	---	5°	---

单击下面可查看定价，库存，交付和生命周期等信息

[>>SHIKUES\(时科\)](#)