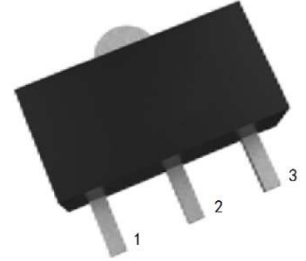


3-Terminal Positive Voltage Regulator

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)

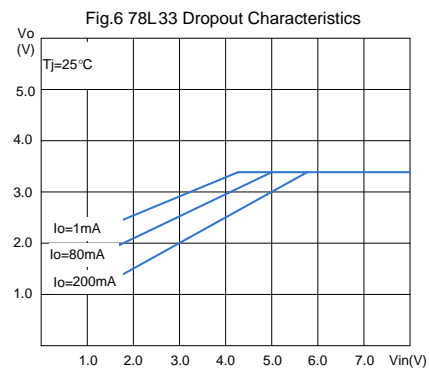
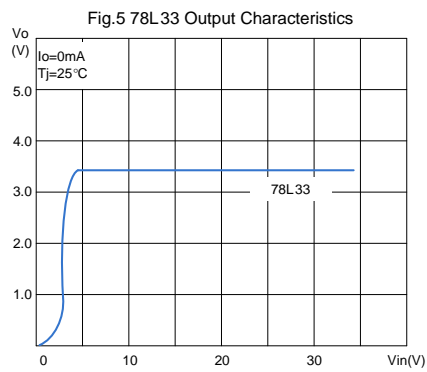
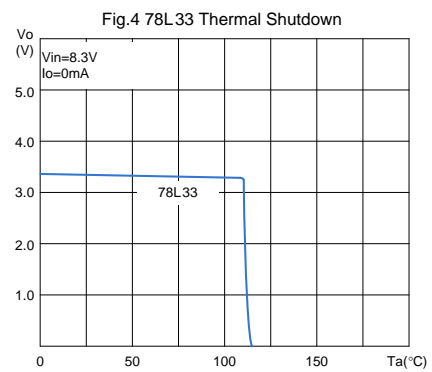
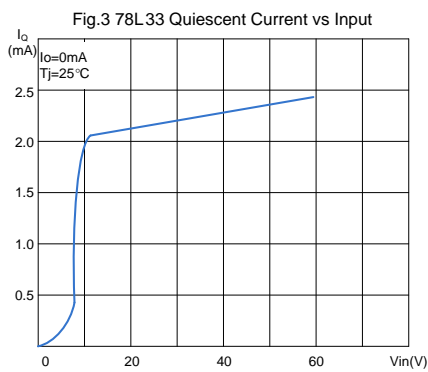
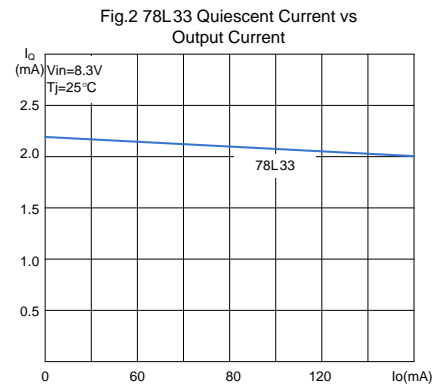
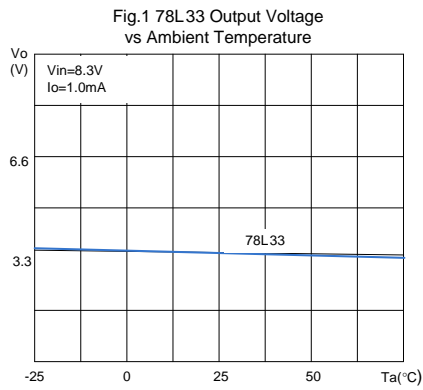
CHARACTERISTICS	SYMBOL	VALUE	UNITS
Input voltage	VIN	30	V
Output Current	IOUT	200	mA
Junction Temperature	TJ	+125	°C
Operating Temperature	TOPR	-20~+120	°C
Storage Temperature Range	TSTG	-40~+150	°C

ELECTRICAL CHARACTERISTICS

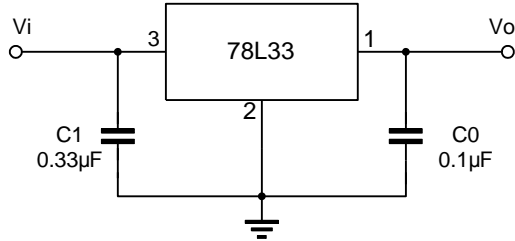
(VI=8.3V, IO=80mA, 0<Tj<125°C, C1=0.33μF, Co=0.1μF, unless otherwise specified)(Note 1)

Characteristic	Symbol	Test conditions	MIN	TYP	MAX	UNI
Output Voltage	VO	Tj=25°C	3.168	3.3	3.432	V
		5.3V≤VI≤20V, IO=1mA~80mA	3.135		3.465	V
		IO=1mA~140mA	3.135		3.465	V (note 2)
Load Regulation	ΔVo	Tj=25°C, IO=1mA~200mA		10	60	mV
		Tj=25°C, IO=1mA~80mA		7	30	mV
Line regulation	ΔVo	5.3V≤VI≤20V, Tj=25°C		7	150	mV
		6.3V≤VI≤20V, Tj=25°C		4	100	mV
Quiescent Current	Iq	Tj=25°C		2.0	5.5	mA
Quiescent Current Change	ΔIq	6.3V≤VI≤20V			1.5	mA
	ΔIq	1mA≤IO≤80mA			0.1	mA
Output Noise Voltage	VN	10Hz≤f≤100kHz, Tj=25°C		40		μV
Temperature coefficient of Vo	ΔVo/ΔT	Io=5mA		0.45		mV/°C
Ripple Rejection	RR	6.3V≤VI≤16.3V, f=120Hz, Tj=25°C	40	49		dB
Dropout Voltage	Vd			1.7		V

TYPICAL PERFORMANCE CHARACTERISTICS



TYPICAL APPLICATION

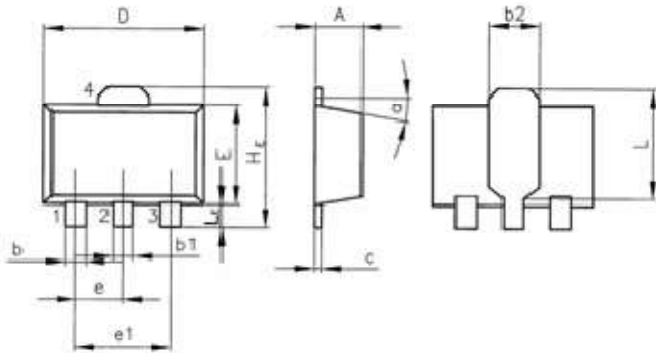


Note 1: The Maximum steady state usable output current and input voltage are very dependent on the heating sinking and/or lead temperature length of the package. The data above represent pulse test conditions with junction temperatures as indicated at the initiation of test.

Note 2: Power dissipation P_D.

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	---
a	---	5°	---