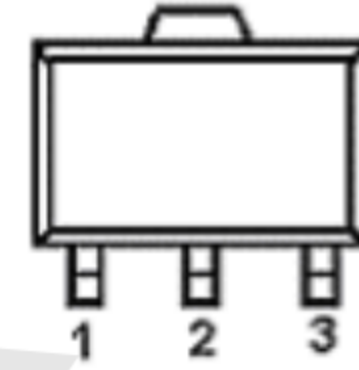


■ Features

- Maximum output current
 $I_{OM}: 0.1A$
- Output voltage
 $V_O: 8V$
- Continuous total dissipation
 $P_D: 0.5W$



1.OUT
2.GND
3.IN

Marking: 78L08

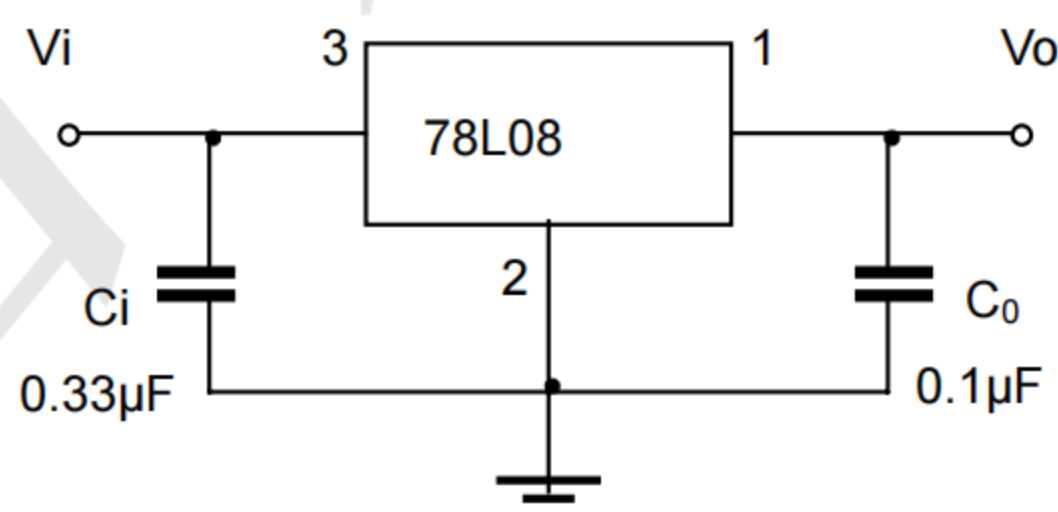
■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Value	Units
Input Voltage	V_I	30	V
Operating Junction Temperature Range	T_{OPR}	0~+150	$^\circ C$
Storage Temperature Range	T_{STG}	-55~+150	$^\circ C$

■ Electrical Characteristics ($V_I=10V, I_O=40mA, 0^\circ C < T_J < 125^\circ C, C_1=0.33 \mu F, C_0=0.1 \mu F$, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output voltage	V_O	$25^\circ C$	7.7	8.0	8.3	V
		$10.5V \leq V_I \leq 23V, I_O=1mA \sim 40mA$	7.6	8.0	8.4	V
		$0-125^\circ C$ $I_O=1mA \sim 70mA$	7.6	8.0	8.4	V
Load Regulation	ΔV_O	$I_O=1mA \sim 100mA$ $25^\circ C$		18	80	mV
		$I_O=1mA \sim 40mA$ $25^\circ C$		10	40	mV
Line regulation	ΔV_O	$10.5V \leq V_I \leq 23V$ $25^\circ C$		42	175	mV
		$11V \leq V_I \leq 23V$ $25^\circ C$		36	125	mV
Quiescent Current	I_q	$25^\circ C$		4	6	mA
Quiescent Current Change	ΔI_q	$11V \leq V_I \leq 23V$ $0-125^\circ C$			1.5	mA
		$1mA \leq I_O \leq 40mA$ $0-125^\circ C$			0.1	mA
Output Noise Voltage	V_N	$10Hz \leq f \leq 100KHz$ $25^\circ C$		54		μV
Ripple Rejection	RR	$13V \leq V_I \leq 23V, f=120Hz$ $0-125^\circ C$	37	46		dB
Dropout Voltage	V_d	$25^\circ C$		1.7		V

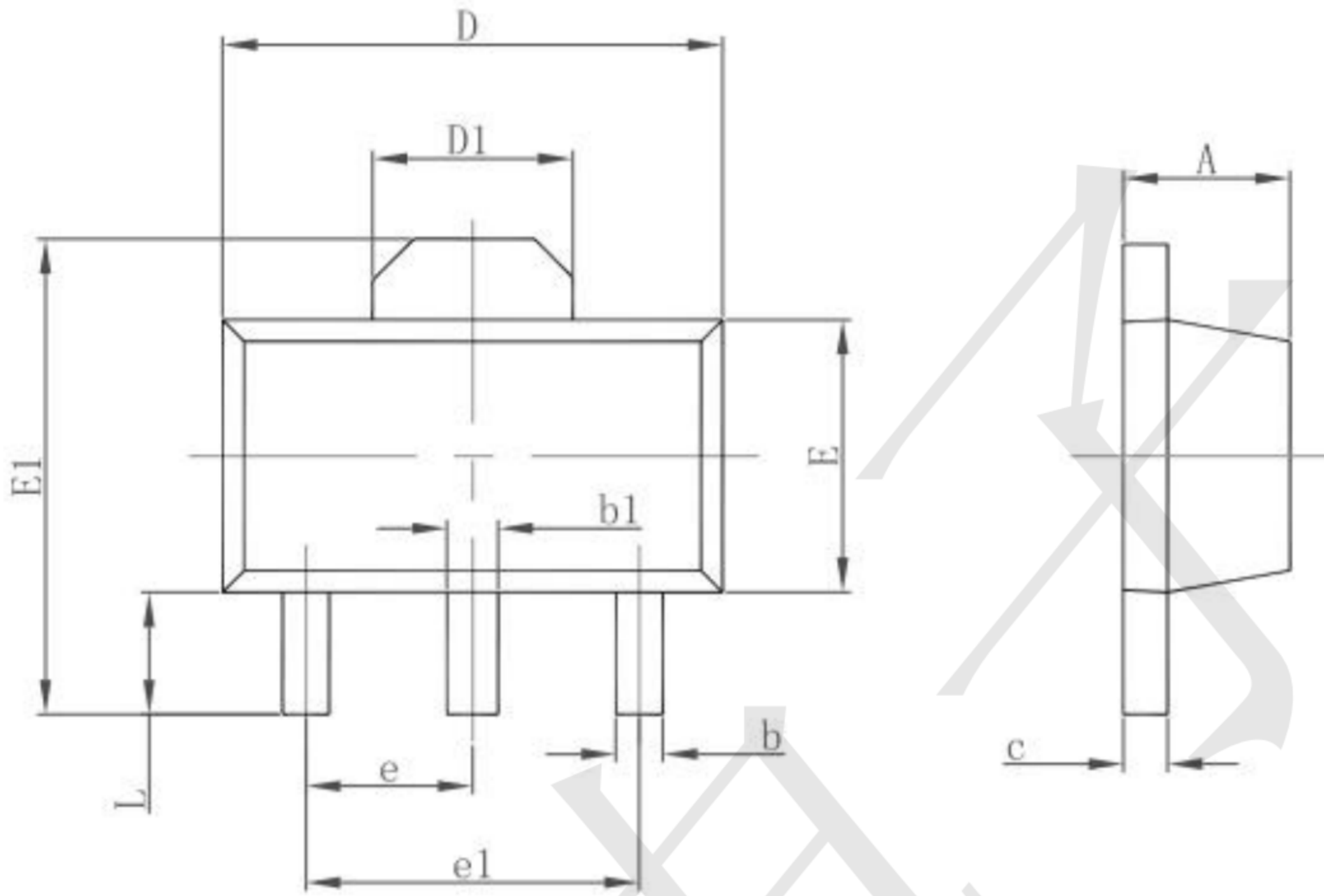
■ Typical application.





Package information

SOT89-3



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	1.400	1.600	0.055	0.063
b	0.320	0.520	0.013	0.020
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	2.300	2.600	0.091	0.102
E1	3.940	4.250	0.155	0.167
e	1.500 TYP.		0.060 TYP.	
e1	3.000 TYP.		0.118 TYP.	
L	0.900	1.200	0.035	0.047