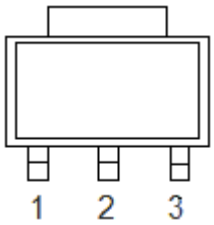
1.Features

- Maximum output current:0.2A
- Output voltage:5V
- Internal thermal overload protection
- Internal short circuit current limiting

2. Pin information



SOT89 Front View

Pin	Description
1	V_{OUT}
2	GND
3	V_{IN}

3. Maximum ratings

Characteristic	Symbol	Rating	Units
Input voltage	V_{IN}	35	V
Power dissipation	P_D	1	W
Junction temperature	TJ	-20～+125	°C
Operating temperature	T_{OPR}	-30~+85	°C
Storage temperature	T_{STG}	-55~+150	°C

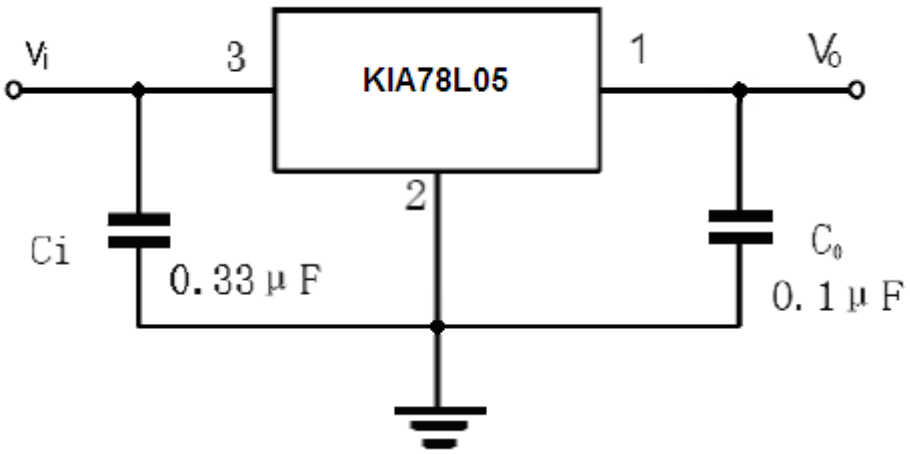
4. Electrical characteristics

(unless otherwise noted, V_{IN}=10V,I_{OUT}=40mA,C_{IN}=0.33uF,C_{OUT}=0.1uF,T_J=-30°C to 85°C)

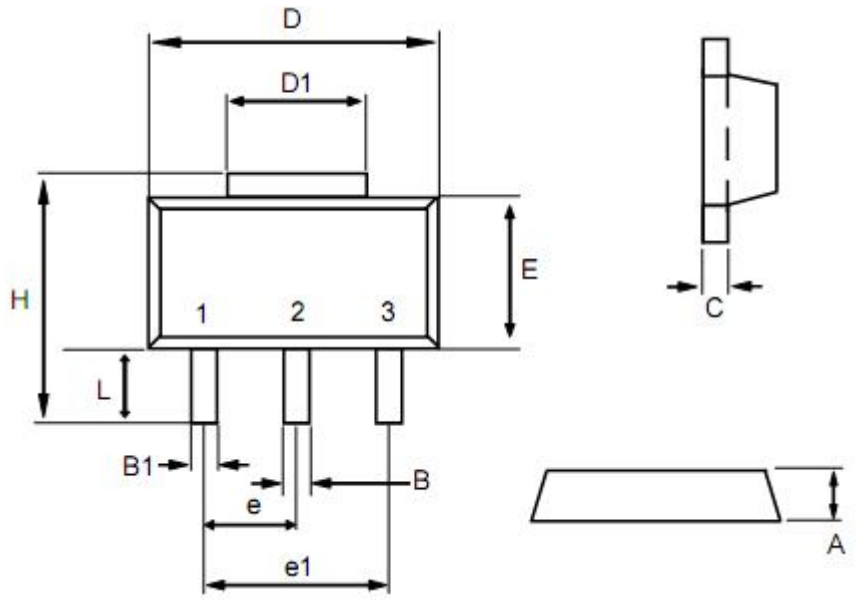
Parameter	Symbol	Condition		Min	Typ	Max	Unit
Output voltage	V_{OUT}	T_j=25°C		4.825	5.0	5.175	V
		7V≤V_{IN}≤20V, I_O=5mA~150mA(*)		4.75	5.0	5.25	
Line regulation	Reg line	T_j=25°C	7V≤V_{IN}≤20V	-	30	100	mV
			8V≤V_{IN}≤20V	-	10	50	mV
Load regulation	Reg load	T_j=25°C	1.0mA≤I_{OUT}≤200mA	-	11	60	mV
			1.0mA≤I_{OUT}≤40mA	-	5.0	30	mV
Quiescent current	I_Q	T_j=25°C		-	3.8	6.0	mA
Quiescent current change	ΔI_Q	7V≤V_{IN}≤20V, I_O=40mA		-	-	1.5	mA
		5mA≤I_{OUT}≤150mA		-	-	0.1	mA
Output noise voltage	V_{NO}	10Hz≤f≤100KHz		-	40	-	uVrm
Ripple rejection ratio	RR	7V≤V_{IN}≤20V, T_j=25°C,f=120Hz		41	49	-	dB
Dropout voltage	IV_{IN}-$V_{OUT}I$	T_j=25°C,I_{OUT}=40mA		-	1.7	-	V
Short circuit current limit	Isc	T_j=25°C		-	-0.6	-	A

*When Vin-Vout>7V,Iout<0.15mA.

5. Appllcation circuits



6. Package outline



Dim	min	max
A	1.40	1.60
B	0.40	0.56
B1	0.35	0.48
C	0.35	0.44
D	4.40	4.60
D1	1.35	1.83
e	1.50 BSC	
e1	3.00 BSC	
E	2.29	2.60
H	3.75	4.25
L	0.80	1.20