

● Features:

Output current in excess of 150 mA No external components required Internal short circuit current limiting
 Internal thermal overload protection Available in either 5% selections

78L08

Three-terminal fixed output voltage regulator
 0.5W, 0.15A, 8V

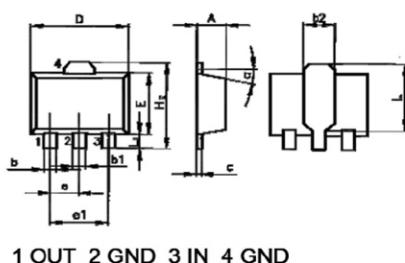
● Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Ratings	Unit
Input voltage (Ta=25°C)	V _I	35	V
Output current	I _O	0.15	A
Power dissipation (Ta=25°C)	P _D	0.5	W
Ambient temperature	T _{OP}	-40~85	°C
Storage Temperature	T _{STG}	-55~150	°C

Device is installed in a good heat dissipation


● Electrical characteristics (Unless otherwise specified) 0 ≤ T_J ≤ +125°C, V_I=14V, I_O=40mA, C_I=0.33μF, C_O=0.1μF)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output voltage	V _O	T _J =25°C	7.6	8.0	8.4	V
		1mA ≤ I _O ≤ 40mA, 10.5V ≤ V _I ≤ 23V	7.44	8	8.56	
Voltage Regulation	S _V	T _J =25°C	10.5V ≤ V _I ≤ 23V	—	175	mV
			11V ≤ V _I ≤ 23V	—	125	
Current Regulation	S _I	T _J =25°C, 1mA ≤ I _O ≤ 100mA	—	—	80	mV
Quiescent Current	I _Q	T _J =25°C	—	—	6.5	mA
Quiescent Current Change	△I _Q	1mA ≤ I _O ≤ 40mA	—	—	0.1	mA
		11V ≤ V _I ≤ 23V	—	—	1.5	
Input - output differential pressure	V _I -V _O	T _J =25°C	—	1.7	—	V
Ripple Rejection Ratio	Srip	T _J =25°C, 12V ≤ V _I ≤ 23V; f=120Hz	—	45	—	dB

SOT-89 Dimensions


Symbol	SOT-89			Symbol	SOT-89			Unit : mm
	min	typ	max		min	typ	max	
A		1.5		e		1.5		
b			0.65	e ₁		3		
b ₁			0.65	H _E			4.25	
b ₂		1.6		L	2.6		2.95	
c	0.25			L _E	0.8		1.2	
D		4.5		a			10°	
E			2.6					