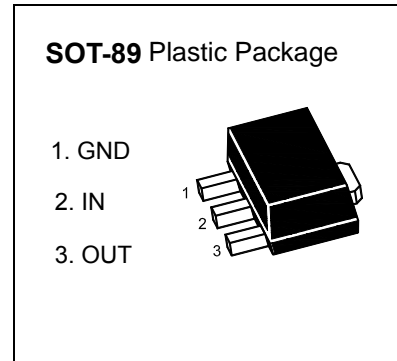


Encapsulate Three-terminal Voltage Regulators

Three-terminal negative voltage regulator

FEATURES

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



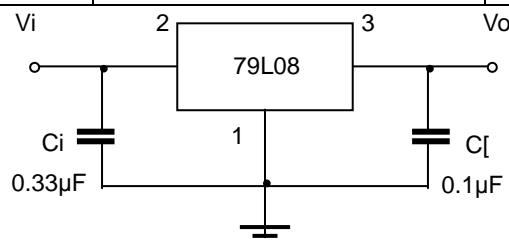
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Unit
Input Voltage	V_I	-30	V
Operating Junction Temperature Range	T_{OPR}	0~+150	°C
Storage Temperature Range	T_{STG}	-55~+150	°C

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE ($V_I=-14\text{V}$, $I_o=40\text{mA}$, $C_i=0.33\mu\text{F}$, $C_o=0.1\mu\text{F}$, unless otherwise specified)

Parameter	Symbol	Test conditions	$M\%b$	Tnd	MU	$l\ b\%h$	
Output Voltage	V_o	25°C	-7.7	-8.0	-8.3	V	
		0-125°C	$-10.5\text{V} \leq V_I \leq -23\text{V}$, $I_o=1\text{mA} \sim 40\text{mA}$	-7.6	-8.0	-8.4	V
			$I_o=1\text{mA} \sim 70\text{mA}$	-7.6	-8.0	-8.4	V
Load Regulation	ΔV_o	$I_o=1\text{mA} \sim 100\text{mA}$, 25°C		30	100	mV	
		$I_o=1\text{mA} \sim 40\text{mA}$, 25°C		15	50	mV	
Line Regulation	ΔV_o	$-10.5\text{V} \leq V_I \leq -23\text{V}$, 25°C		42	200	mV	
		$-11\text{V} \leq V_I \leq -23\text{V}$, 25°C		36	150	mV	
Quiescent Current	I_q	25°C		4	6	mA	
Quiescent Current Change	ΔI_q	$-11\text{V} \leq V_I \leq -23\text{V}$, 0-125°C			1.5	mA	
		$1\text{mA} \leq I_o \leq 40\text{mA}$, 0-125°C			0.1	mA	
Output Noise Voltage	V_N	10Hz ≤ f ≤ 100KHz, 25°C		54		uV	
Ripple Rejection	RR	$-11\text{V} \leq V_I \leq -21\text{V}$, f=120Hz, 0-125°C	37	46		dB	
Dropout Voltage	V_d	25°C		1.7		V	

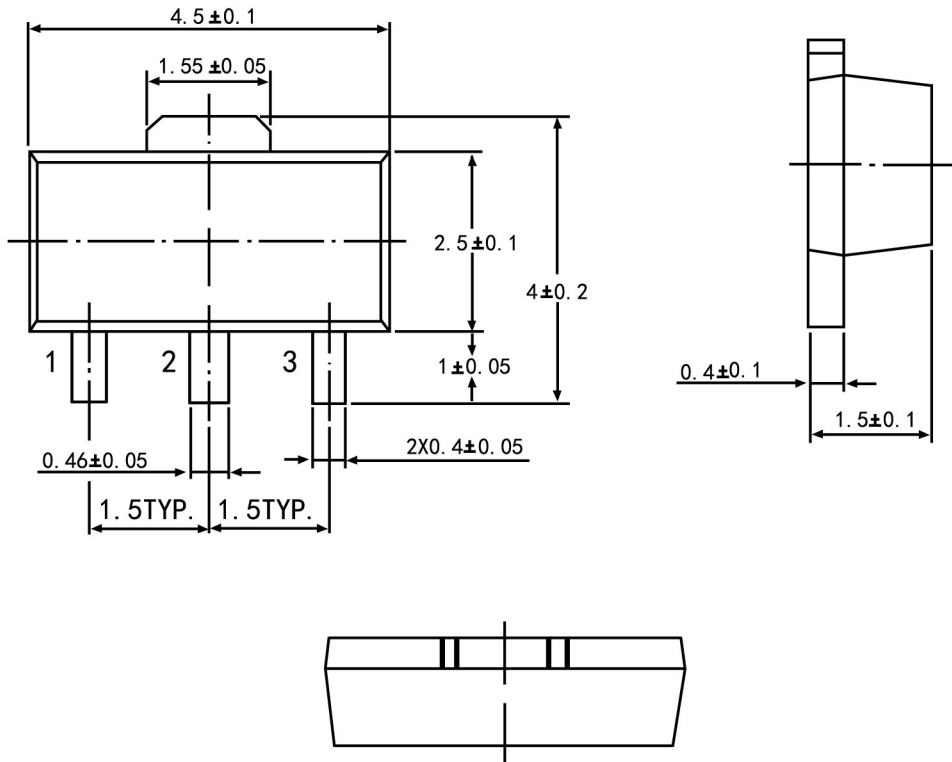
TYPICAL APPLICATION



Note: Bypass capacitors are recommended for optimum stability and transient response and should be located as close as possible to the regulators.



SOT-89 PACKAGE OUTLINE



Symbol	Dimension in Millimeters	
	Min	Max
A	1.40	1.60
B	0.44	0.62
B1	0.35	0.54
C	0.35	0.44
D	4.40	4.60
D1	1.62	1.83
E	2.29	2.60
e	1.50 Typ	
H	3.94	4.25
H1	2.63	2.93
L	0.89	1.20
All Dimensions In mm		