

Encapsulate Three terminal voltage regulators

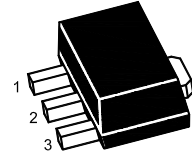
Three-terminal negative voltage regulator

FEATURES

- Maximum output current
 I_{OM} : 0.1 A
- Output voltage
 V_O : -12 V
- Continuous total dissipation
 P_D : 0.5 W

SOT-89 Plastic Package

1. GND
2. IN
3. OUT



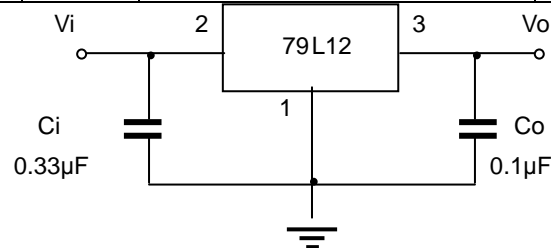
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Unit
Input Voltage	V_I	-35	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 ($V_I=19V, I_O=40mA, C_i=0.33\mu F, C_o=0.1\mu F$, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit	
Output Voltage	V_O	25°C	-11.5	-12	-12.5	V	
		-14.5V ≤ V_I ≤ -27V, $I_O=1mA \sim 40mA$	0-125°C	-11.4	-12	-12.6	V
		$I_O=1mA \sim 70mA$		-11.4	-12	-12.6	V
Load Regulation	ΔV_O	$I_O=1mA \sim 100mA$	25°C	24	100	mV	
		$I_O=1mA \sim 40mA$	25°C	15	50	mV	
Line Regulation	ΔV_O	-14.5V ≤ V_I ≤ -27V	25°C	50	250	mV	
		-16V ≤ V_I ≤ -27V	25°C	40	200	mV	
Quiescent Current	I_q	25°C			6.5	mA	
Quiescent Current Change	ΔI_q	-16V ≤ V_I ≤ -27V	0-125°C		1.5	mA	
	ΔI_q	1mA ≤ I_O ≤ 40mA	0-125°C		0.1	mA	
Output Noise Voltage	V_N	10Hz ≤ f ≤ 100KHz	25°C	80		μV	
Ripple Rejection	RR	-15V ≤ V_I ≤ -25V, f=120Hz	0-125°C	37	42	dB	
Dropout Voltage	V_d	25°C		1.7		V	

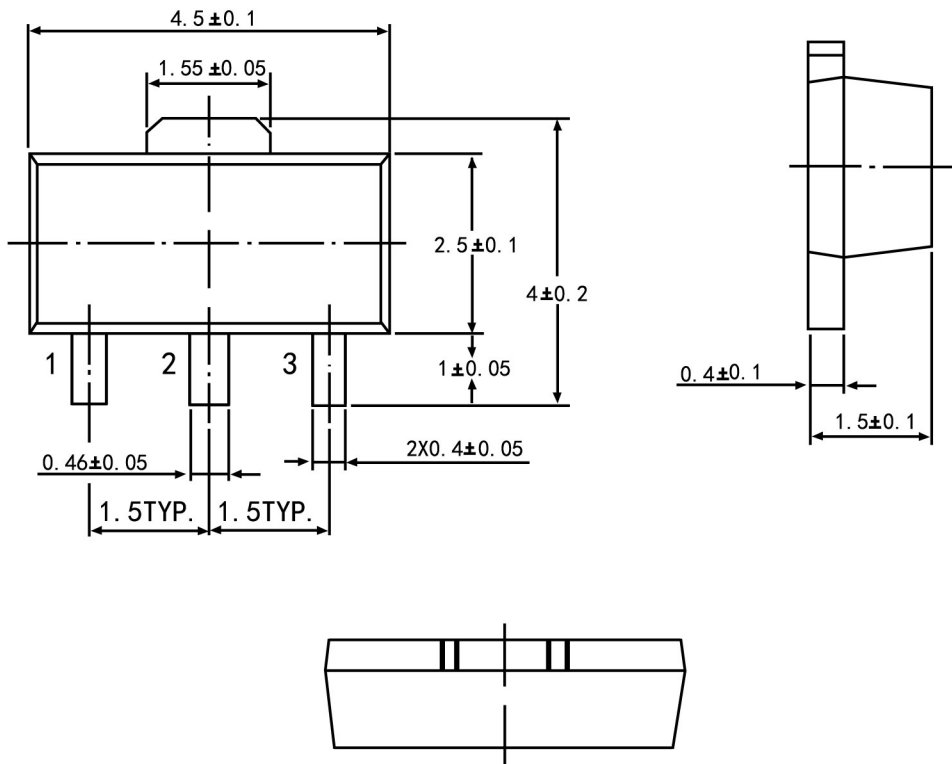
TYPICAL APPLICATION



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		