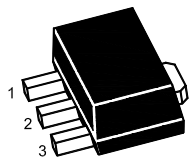
Encapsulate Three Terminal Voltage Regulators

Three-terminal negative voltage regulator

SOT-89 Plastic Package



1. GND
2. IN
3. OUT

FEATURES

- Maximum output current
  $I_{OM:}$ 0.1A
- Output voltage
  V_o: -5 V
- Continuous total dissipation
  P_D:0.5 W

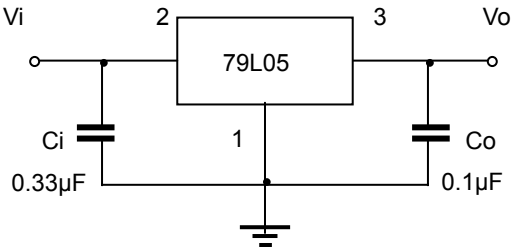
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Units
Input Voltage	V_i	-30	V
Operating Junction Temperature Range	T_{OPR}	0~+150	℃
Storage Temperature Range	T_{STG}	-55~+150	℃

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JINCTION TEMPERATURE (V_I=-10V,Io=40mA,Ci=0.33μF,Co=0.1μF, unless otherwise specified)

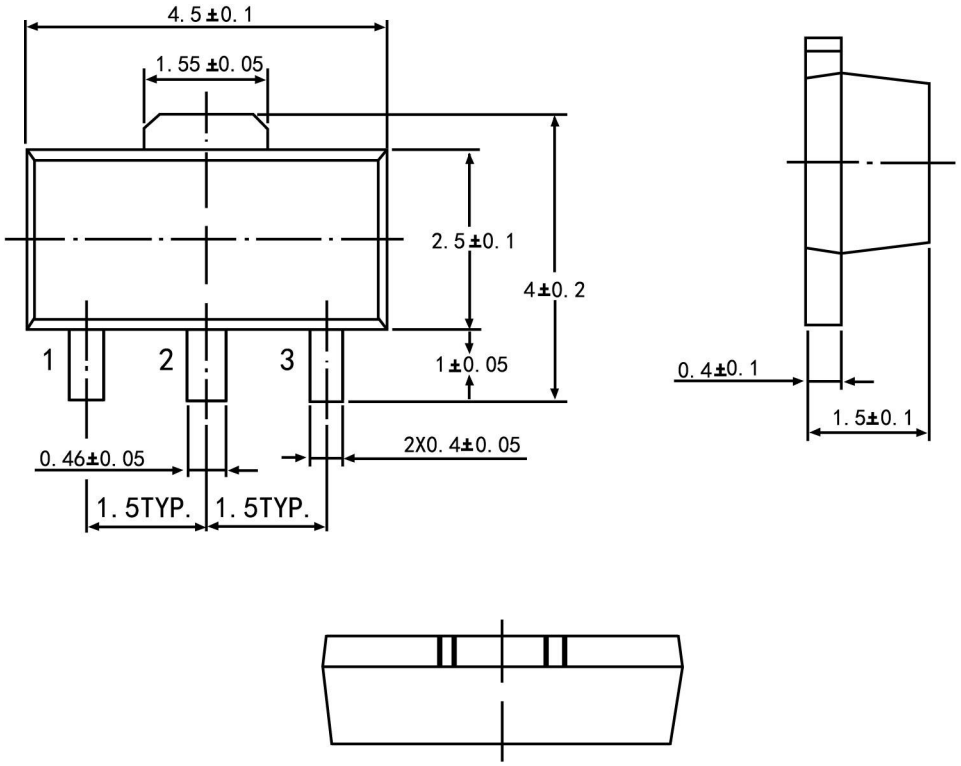
Parameter	Symbol	Test conditions		Min	Typ	Max	Unit
Output Voltage	Vo		25℃	-4.8	-5.0	-5.2	V
		-7V≤V_I≤-20V, Io=1mA~40mA	0-125℃	-4.75	-5.0	-5.25	V
		Io=1mA~70mA		-4.75	-5.0	-5.25	V
Load Regulation	ΔVo	Io=1mA~100mA	25℃		20	60	mV
		Io=1mA~40mA	25℃		10	30	mV
Line Regulation	ΔVo	-7V≤V_I≤-20V	25℃		15	150	mV
		-8V≤V_I≤-20V	25℃		12	100	mV
Quiescent Current	Iq		25℃			6	mA
Quiescent Current Change	ΔIq	-8V≤V_I≤-20V	0-125℃			1.5	mA
	ΔIq	1mA≤V_I≤40mA	0-125℃			0.1	mA
Output Noise Voltage	V_N	10Hz≤f≤100KHz	25℃		40		μV
Ripple Rejection	RR	-8V≤V_I≤-18V,f=120Hz	0-125℃	41	49		dB
Dropout Voltage	Vd		25℃		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		