

Encapsulate Three terminal voltage regulators

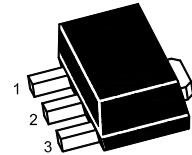
Three-terminal negative voltage regulator

FEATURES

SOT-89 Plastic Package

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

1. GND
2. IN
3. OUT



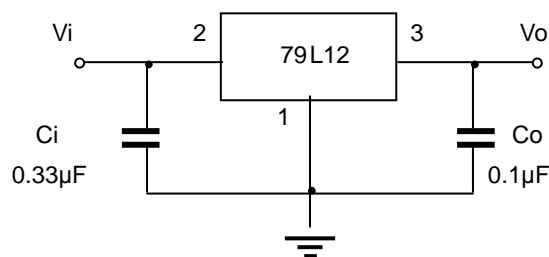
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

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)

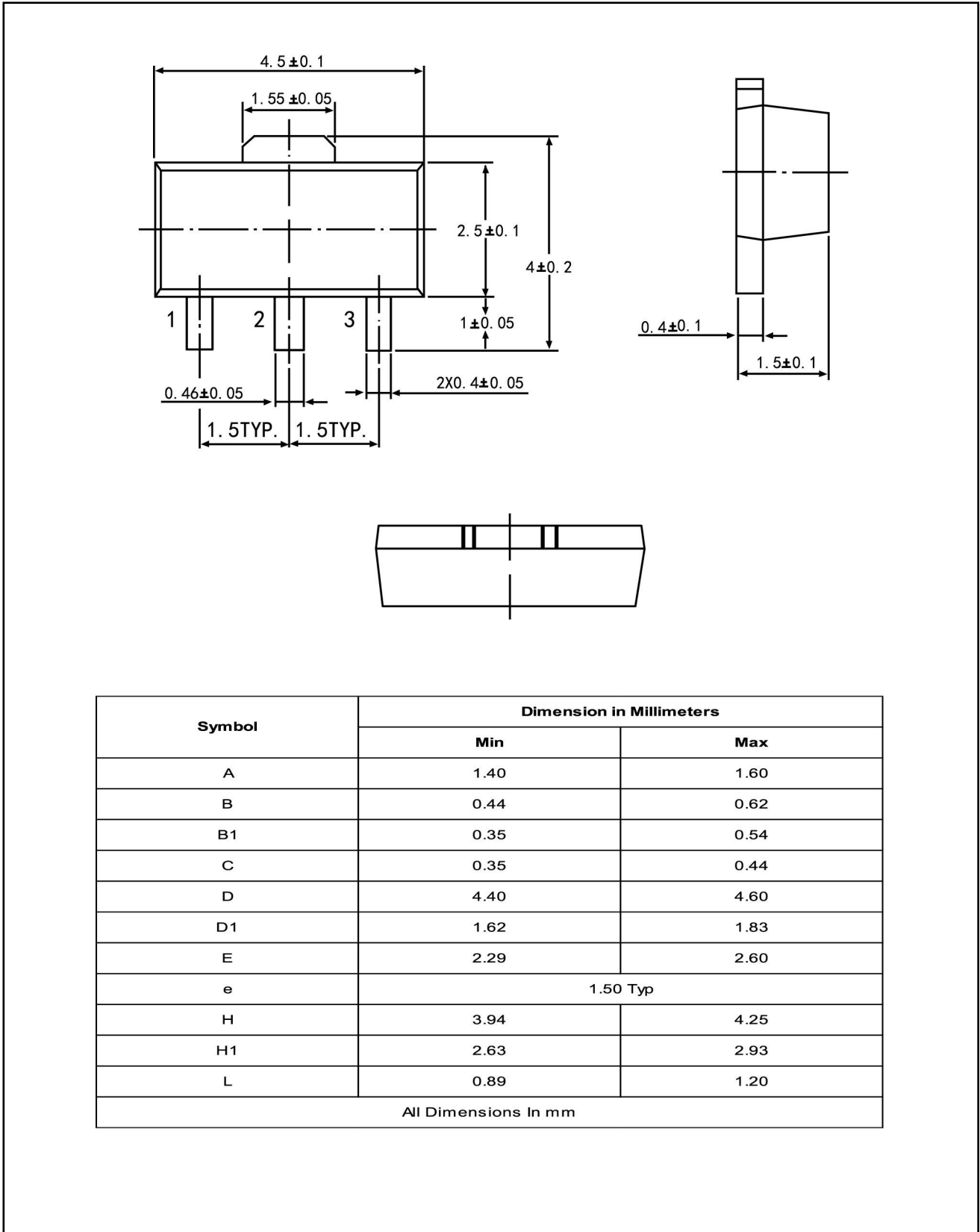
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output Voltage	V_o	$25^\circ C$	-11.5	-12	-12.5	V
		$-14.5V \leq V_i \leq -27V, I_o=1mA \sim 40mA$	-11.4	-12	-12.6	V
		$0-125^\circ C, I_o=1mA \sim 70mA$	-11.4	-12	-12.6	V
Load Regulation	ΔV_o	$I_o=1mA \sim 100mA, 25^\circ C$		24	100	mV
		$I_o=1mA \sim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