

SOT-89 Encapsulate Three terminal voltage regulators

FEATURES

Maximum output current

I_{OM} : 0.1 A

Output voltage

V_o : -12 V

Continuous total dissipation

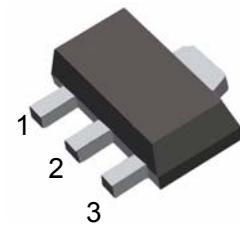
P_D : 0.5 W

SOT-89

1. GND

2. IN

3. OUT



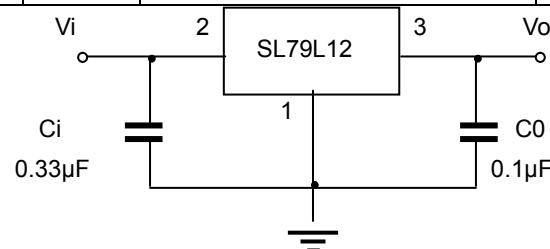
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Units
Input Voltage	V_I	-35	V
Operating Junction Temperature Range	T_{OPR}	0~+125	°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, $I_o=1mA~40mA$	0-125°C	-11.4	-12	-12.6	V
		$I_o=1mA~70mA$		-11.4	-12	-12.6	V
Load Regulation	ΔV_o	$I_o=1mA~100mA$	25°C	24	100	mV	
		$I_o=1mA~40mA$	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		uV	
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

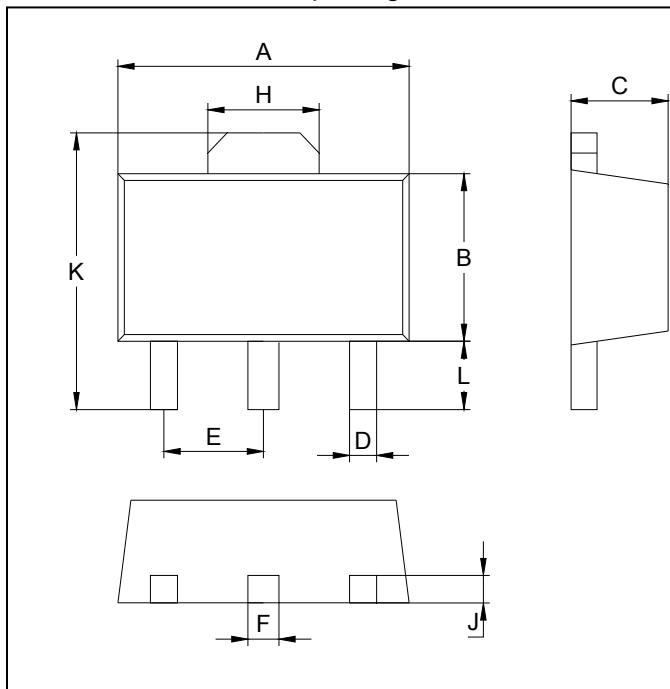


Note: Bypass capacitors are recommended for optimum stability and transient response and should be located as close as possible to the regulators.

PACKAGE OUTLINE

Plastic surface mounted package

SOT-89



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Dim	Min	Max
A	4.30	4.70
B	2.25	2.65
C	1.50 Typical	
D	0.40 Typical	
E	1.40	1.60
F	0.48 Typical	
H	1.60	1.80
J	0.40 Typical	
L	0.90	1.10
K	3.95	4.35

All Dimensions in mm

SOLDERING FOOTPRINT

