

## SOT-89 Encapsulate Three terminal voltage regulators

### FEATURES

Maximum output current

$$I_{OM}: 0.1 \text{ A}$$

Output voltage

$$V_o: -12 \text{ V}$$

Continuous total dissipation

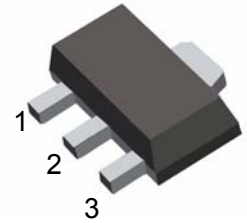
$$P_D: 0.5 \text{ W}$$

### SOT-89

1. GND

2. IN

3. OUT



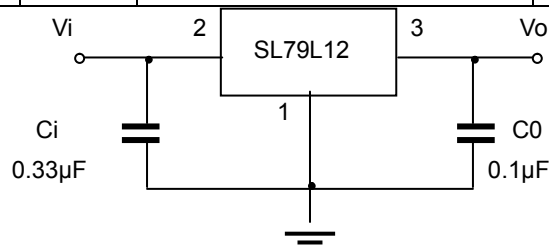
### ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

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 ( $V_I=19\text{V}, I_o=40\text{mA}, C_i=0.33\mu\text{F}, C_o=0.1\mu\text{F}$ , unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output voltage	$V_o$	25°C	-11.5	-12	-12.5	V
		-14.5V ≤ $V_I$ ≤ -27V, $I_o=1\text{mA} \sim 40\text{mA}$	-11.4	-12	-12.6	V
		0-125°C, $I_o=1\text{mA} \sim 70\text{mA}$	-11.4	-12	-12.6	V
Load Regulation	$\Delta V_o$	$I_o=1\text{mA} \sim 100\text{mA}$ , 25°C		24	100	mV
		$I_o=1\text{mA} \sim 40\text{mA}$ , 25°C		15	50	mV
Line regulation	$\Delta V_o$	-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	$\Delta I_q$	-16V ≤ $V_I$ ≤ -27V, 0-125°C			1.5	mA
	$\Delta I_q$	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

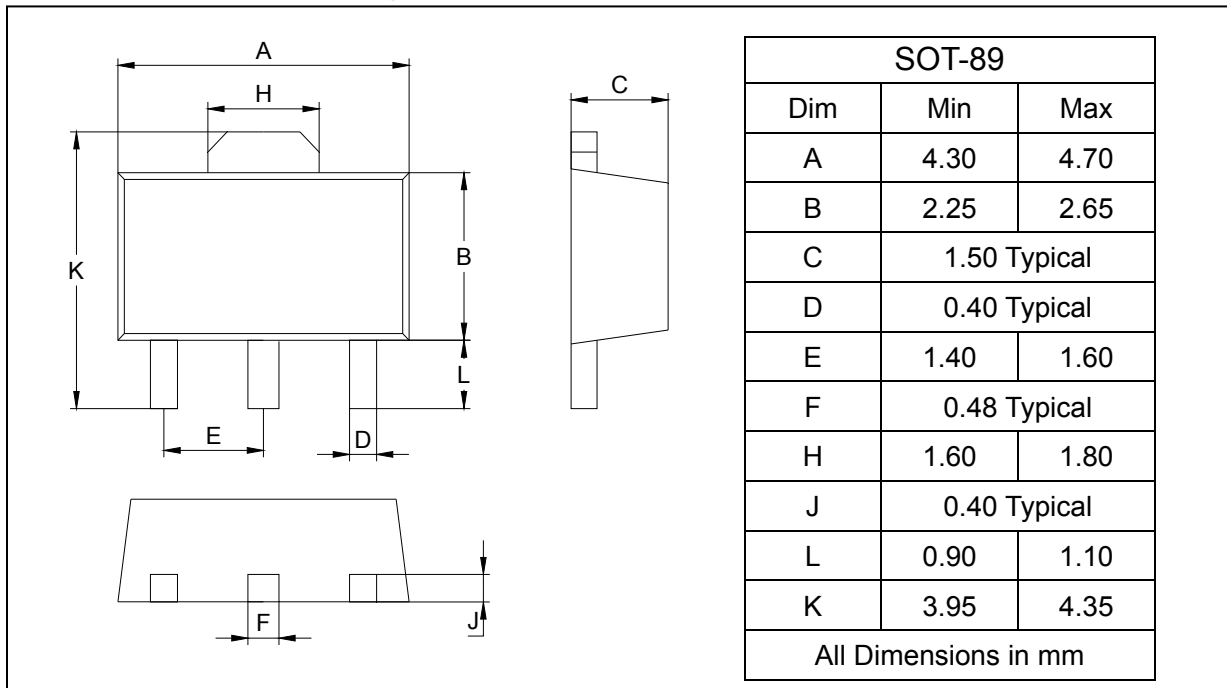


Note: Bypass capacitors are recommended for optimum stability and transient response and should be located as close as possible to the regulators.

**PACKAGE OUTLINE**

Plastic surface mounted package

SOT-89



**SOLDERING FOOTPRINT**

