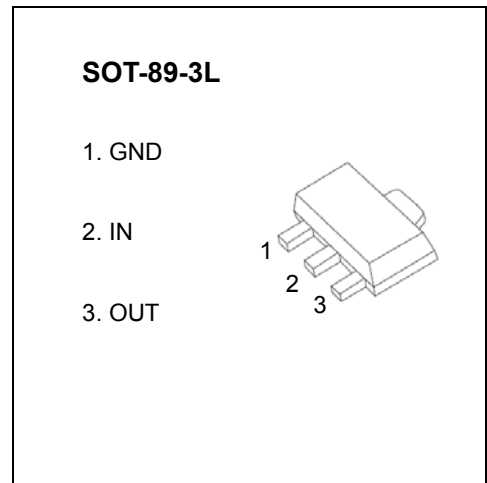


# SOT-89-3L Encapsulate Three-terminal Voltage Regulators

## CJ79L08 Three-terminal negative voltage regulator

### FEATURES

- Maximum output current  
 $I_{OM}: 0.1\text{ A}$
- Output voltage  
 $V_O: -8\text{ V}$
- Continuous total dissipation  
 $P_D: 0.5\text{ W}$



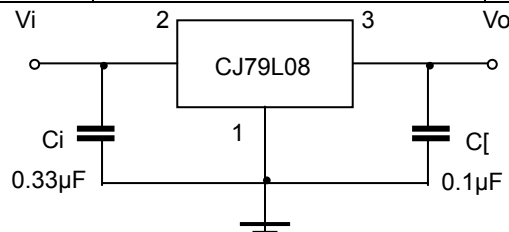
### ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Unit
Input Voltage	$V_i$	-30	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 ( $V_i=-14\text{V}, I_o=40\text{mA}, C_i=0.33\mu\text{F}, C_o=0.1\mu\text{F}$ , unless otherwise specified)

Parameter	Symbol	Test conditions	$M_j$	$T_{nd}$	$MU$	$I_{b/h}$	
Output Voltage	$V_o$	$25^\circ\text{C}$	-7.7	-8.0	-8.3	V	
		0-125°C	$-10.5\text{V} \leq V_i \leq -23\text{V}, I_o=1\text{mA} \sim 40\text{mA}$	-7.6	-8.0	-8.4	V
			$I_o=1\text{mA} \sim 70\text{mA}$	-7.6	-8.0	-8.4	V
Load Regulation	$\Delta V_o$	$I_o=1\text{mA} \sim 100\text{mA}$	25°C	30	100	mV	
		$I_o=1\text{mA} \sim 40\text{mA}$	25°C	15	50	mV	
Line Regulation	$\Delta V_o$	$-10.5\text{V} \leq V_i \leq -23\text{V}$	25°C	42	200	mV	
		$-11\text{V} \leq V_i \leq -23\text{V}$	25°C	36	150	mV	
Quiescent Current	$I_q$	25°C	4	6	mA		
Quiescent Current Change	$\Delta I_q$	$-11\text{V} \leq V_i \leq -23\text{V}$	0-125°C		1.5	mA	
	$\Delta I_q$	$1\text{mA} \leq I_o \leq 40\text{mA}$	0-125°C		0.1	mA	
Output Noise Voltage	$V_N$	10Hz ≤ f ≤ 100KHz	25°C	54		uV	
Ripple Rejection	RR	$-11\text{V} \leq V_i \leq -21\text{V}, f=120\text{Hz}$	0-125°C	37	46	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.