

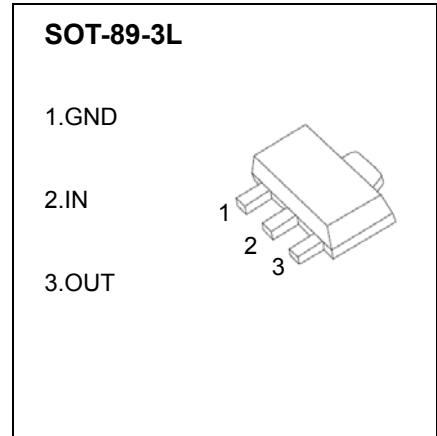


**SOT-89-3L Encapsulate Three terminal voltage regulators**

**CJ79L09** Three-terminal negative voltage regulator

**FEATURES**

- Maximum output current  
 $I_{OM}: 0.1\text{ A}$
- Output voltage  
 $V_o: -9\text{ V}$
- Continuous total dissipation  
 $P_D: 0.5\text{ W}$



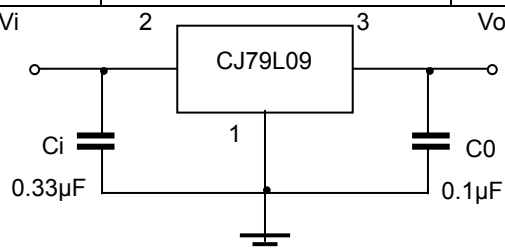
**ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)**

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 ( $V_i=-16\text{V}, I_o=40\text{mA}, C_i=0.33\mu\text{F}, C_o=0.1\mu\text{F}$ , unless otherwise specified )**

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit	
Output Voltage	$V_o$	$25^\circ\text{C}$	-8.64	-9.0	-9.36	V	
		0-125°C	$-12\text{V} \leq V_i \leq -24\text{V}, I_o=1\text{mA}-40\text{mA}$	-8.55	-9.0	-9.45	V
			$I_o=1\text{mA}-70\text{mA}$	-8.55	-9.0	-9.45	V
Load Regulation	$\Delta V_o$	$I_o=1\text{mA}-100\text{mA}$	$25^\circ\text{C}$	19	90	mV	
		$I_o=1\text{mA}-40\text{mA}$	$25^\circ\text{C}$	11	40	mV	
Line Regulation	$\Delta V_o$	$-12\text{V} \leq V_i \leq -24\text{V}$	$25^\circ\text{C}$	45	175	mV	
		$-13\text{V} \leq V_i \leq -24\text{V}$	$25^\circ\text{C}$	40	125	mV	
Quiescent Current	$I_q$	$25^\circ\text{C}$		4.1	6.0	mA	
Quiescent Current Change	$\Delta I_q$	$-13\text{V} \leq V_i \leq -24\text{V}$	0-125°C		1.5	mA	
	$\Delta I_q$	$1\text{mA} \leq V_i \leq 40\text{mA}$	0-125°C		0.1	mA	
Output Noise Voltage	$V_N$	10Hz≤f≤100KHz	$25^\circ\text{C}$	58		uV	
Ripple Rejection	RR	$-15\text{V} \leq V_i \leq -24\text{V}, f=120\text{Hz}$	0-125°C	45		dB	
Dropout Voltage	$V_d$	$25^\circ\text{C}$		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