

## Encapsulate Three terminal voltage regulators

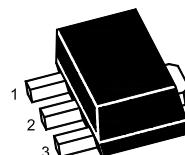
Three-terminal negative voltage regulator

### FEATURES

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

### SOT-89 Plastic Package

1. GND
2. IN
3. OUT



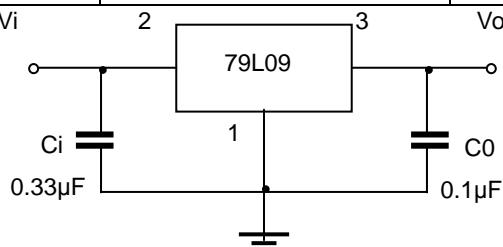
### ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

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 ( $V_I=-16V, I_O=40mA, C_i=0.33\mu F, C_o=0.1\mu F$ , unless otherwise specified)

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