



SOT-89 Encapsulate Three Terminal Voltage Regulator

79L09 Three-terminal negative voltage regulator

FEATURES

Maximum Output current

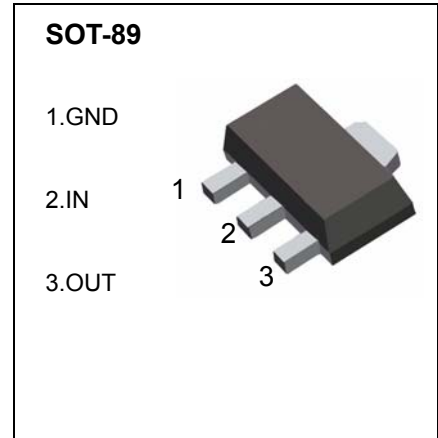
$$I_{OM}: 0.1 A$$

Output voltage

$$V_o: -9 V$$

Continuous total dissipation

$$P_D: 0.5W$$

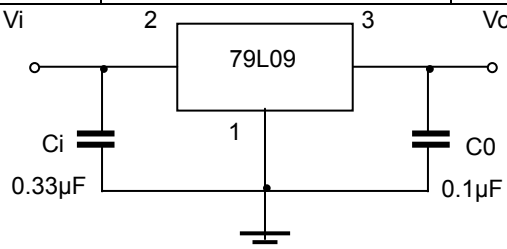


ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)			
Parameter	Symbol	Value	Units
Input Voltage	V_I	-30	V
Operating Junction Temperature Range	T_{OPR}	0—+125	°C
Storage Temperature Range	T_{STG}	-55—+150	°C

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE ($V_i=-16V, I_o=40mA, C_i=0.33\mu F, C_o=0.1\mu F$, unless otherwise specified)

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

Typical Characteristics

79LXX

