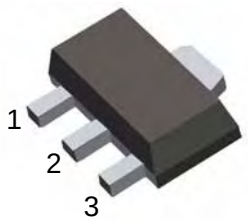
79L09

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

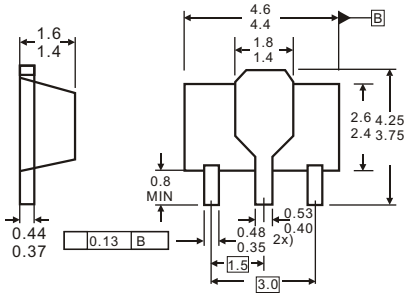


1.GND

2.IN

3.OUT

SOT-89



Dimensions in inches and (millimeters)

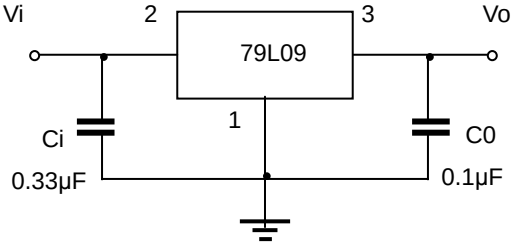
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Units
Input Voltage	V_I	-30	V
Operating Junction Temperature Range	T_{OPR}	0—+125	℃
Storage Temperature Range	T_{STG}	-55—+150	℃

ELECTRICAL CHARACTERISTICS (Vi=-16V,Io=40mA,Ci=0.33μF,Co=0.1μF, unless otherwise specified)

Parameter	Symbol	Test conditions		MIN	TYP	MAX	UNIT
Output voltage	Vo		25℃	-8.64	-9.0	-9.36	V
		-12V≤V $_I$≤-24V, Io=1mA-40mA	0-125℃	-8.55	-9.0	-9.45	V
		Io=1mA-70mA		-8.55	-9.0	-9.45	V
Load Regulation	△Vo	Io=1mA-100mA	25℃		19	90	mV
		Io=1mA-40mA	25℃		11	40	mV
Line regulation	△Vo	-12 V≤V$_I$≤-24V	25℃		45	175	mV
		-13V≤V$_I$≤-24V	25℃		40	125	mV
Quiescent Current	Iq		25℃		4.1	6.0	mA
Quiescent Current Change	△Iq	-13V≤V $_I$≤-24V	0-125℃			1.5	mA
	△Iq	1mA≤V $_I$≤40mA	0-125℃			0.1	mA
Output Noise Voltage	V_N	10Hz≤f≤100KHz	25℃		58		uV
Ripple Rejection	RR	-15V≤V$_I$≤-24V,f=120Hz	0-125℃		45		dB
Dropout Voltage	Vd		25℃		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

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TypicalCharacteristics