

SOT-23-3L Encapsulate Three Terminal Voltage Regulators

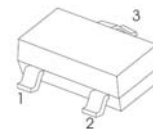
CJ79L09 Three-terminal negative voltage regulator

FEATURES

- Maximum output current
 $I_{OM}: 0.1\text{ A}$
- Output voltage
 $V_O: -9\text{ V}$
- Continuous total dissipation
 $P_D: 0.35\text{ W}$

SOT-23-3L

- 1.GND
2.OUT
3.IN



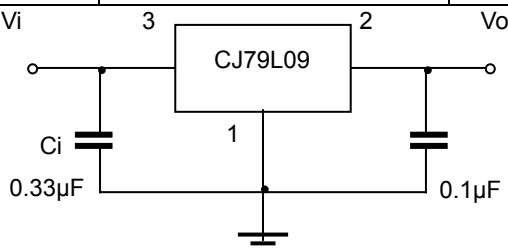
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit	
Output Voltage	V_O	25°C	-8.64	-9.0	-9.36	V	
		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	ΔV_O	$I_O = 1\text{ mA} - 100\text{ mA}$	25°C	19	90	mV	
		$I_O = 1\text{ mA} - 40\text{ mA}$	25°C	11	40	mV	
Line Regulation	ΔV_O	$-12\text{ V} \leq V_I \leq -24\text{ V}$	25°C	45	175	mV	
		$-13\text{ V} \leq V_I \leq -24\text{ V}$	25°C	40	125	mV	
Quiescent Current	I_q	25°C		4.1	6.0	mA	
Quiescent Current Change	ΔI_q	$-13\text{ V} \leq V_I \leq -24\text{ V}$	0-125°C		1.5	mA	
	ΔI_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°C	58		μV	
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°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