

SOT-23-3L Encapsulate Three Terminal Voltage Regulators

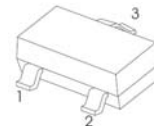
CJ79L08 Three-terminal negative voltage regulator

FEATURES

- Maximum Output current
 $I_{OM}: 0.1\text{ A}$
- Output voltage
 $V_o: -8\text{ V}$
- Continuous total dissipation
 $P_D: 0.35\text{ W}$

SOT-23-3L

1. GND
2. OUT
3. IN



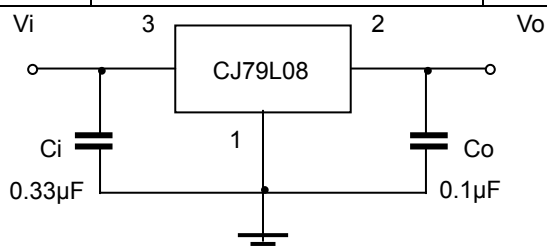
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Units
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 ($V_I = -14\text{V}$, $I_o = 40\text{mA}$, $C_i = 0.33\mu\text{F}$, $C_o = 0.1\mu\text{F}$, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit	
Output Voltage	V_o	25°C	-7.7	-8.0	-8.3	V	
		$-10.5\text{V} \leq V_I \leq -23\text{V}$, $I_o = 1\text{mA} \sim 40\text{mA}$	0-125°C	-7.6	-8.0	-8.4	V
		$I_o = 1\text{mA} \sim 70\text{mA}$		-7.6	-8.0	-8.4	V
Load Regulation	ΔV_o	$I_o = 1\text{mA} \sim 100\text{mA}$, 25°C		30	100	mV	
		$I_o = 1\text{mA} \sim 40\text{mA}$, 25°C		15	50	mV	
Line Regulation	ΔV_o	$-10.5\text{V} \leq V_I \leq -23\text{V}$, 25°C		42	200	mV	
		$-11\text{V} \leq V_I \leq -23\text{V}$, 25°C		36	150	mV	
Quiescent Current	I_q	25°C		4	6	mA	
Quiescent Current Change	ΔI_q	$-11\text{V} \leq V_I \leq -23\text{V}$, $0-125^\circ\text{C}$			1.5	mA	
	ΔI_q	$1\text{mA} \leq I_o \leq 40\text{mA}$, $0-125^\circ\text{C}$			0.1	mA	
Output Noise Voltage	V_N	$10\text{Hz} \leq f \leq 100\text{KHz}$, 25°C		54		μV	
Ripple Rejection	RR	$-11\text{V} \leq V_I \leq -21\text{V}$, $f = 120\text{Hz}$, $0-125^\circ\text{C}$	37	46		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.