

SOT-89-3L Encapsulate Three terminal voltage regulators

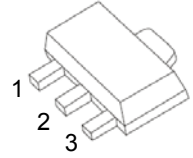
CJ79L12 Three-terminal negative voltage regulator

FEATURES

- Maximum output current
 $I_{OM}: 0.1\text{ A}$
- Output voltage
 $V_o: -12\text{ V}$
- Continuous total dissipation
 $P_D: 0.5\text{ W}$

SOT-89-3L

1. GND
2. IN
3. OUT



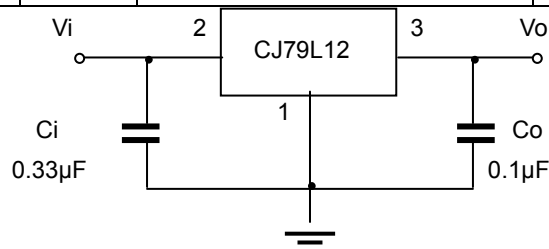
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Unit
Input Voltage	V_I	-35	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 ($V_i=19\text{V}, I_o=40\text{mA}, C_i=0.33\mu\text{F}, C_o=0.1\mu\text{F}$, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit	
Output Voltage	V_o	25°C	-11.5	-12	-12.5	V	
		0-125°C	$-14.5\text{V} \leq V_i \leq -27\text{V}, I_o=1\text{mA} \sim 40\text{mA}$	-11.4	-12	-12.6	V
			$I_o=1\text{mA} \sim 70\text{mA}$	-11.4	-12	-12.6	V
Load Regulation	ΔV_o	$I_o=1\text{mA} \sim 100\text{mA}$	25°C	24	100	mV	
		$I_o=1\text{mA} \sim 40\text{mA}$	25°C	15	50	mV	
Line Regulation	ΔV_o	$-14.5\text{V} \leq V_i \leq -27\text{V}$	25°C	50	250	mV	
		$-16\text{V} \leq V_i \leq -27\text{V}$	25°C	40	200	mV	
Quiescent Current	I_q	25°C			6.5	mA	
Quiescent Current Change	ΔI_q	$-16\text{V} \leq V_i \leq -27\text{V}$	0-125°C		1.5	mA	
	ΔI_q	$1\text{mA} \leq I_o \leq 40\text{mA}$	0-125°C		0.1	mA	
Output Noise Voltage	V_N	$10\text{Hz} \leq f \leq 100\text{kHz}$	25°C	80		µV	
Ripple Rejection	RR	$-15\text{V} \leq V_i \leq -25\text{V}, f=120\text{Hz}$	0-125°C	37	42	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.