



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

## SOT-89 Encapsulate Three-terminal Voltage Regulator

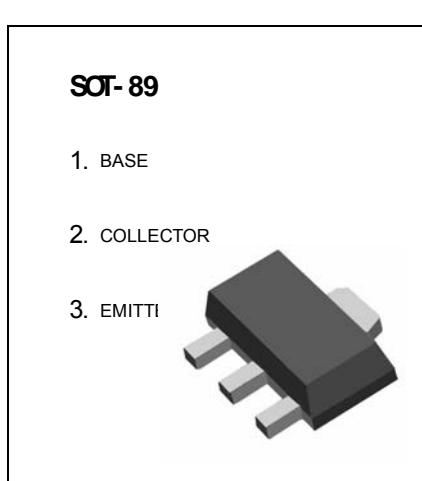
### CJ79L15 Three-terminal positive voltage regulator

#### FEATURES

Maximum Output current

I<sub>OM</sub>: 100 mA

Output voltage

V<sub>O</sub>: -15 V

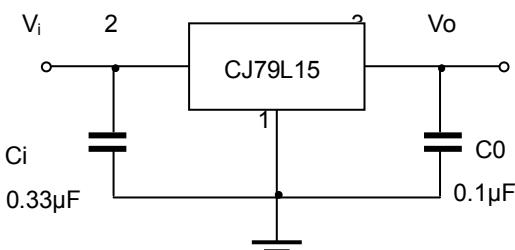
#### ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Units
Input Voltage	V <sub>i</sub>	-35	V
Operating Junction Temperature Range	T <sub>OPR</sub>	-20~+120	°C
Storage Temperature Range	T <sub>STG</sub>	-55~+150	°C

#### ELECTRICAL CHARACTERISTICS (V<sub>i</sub>=-23V, I<sub>O</sub>=40mA, 0°C < T<sub>j</sub> < 125°C, C<sub>1</sub>=0.33μF, C<sub>0</sub>=0.1μF, unless otherwise specified )

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Output voltage	V <sub>O</sub>	T <sub>j</sub> =25°C	-14.4	-15	-15.6	V
		-17.5V≤V <sub>i</sub> ≤-30V, I <sub>O</sub> =1mA~40mA	-14.25	-15	-15.75	V
		V <sub>i</sub> =-23V, I <sub>O</sub> =1mA~70mA	-14.25	-15	-15.75	(note)
Load Regulation	ΔV <sub>O</sub>	T <sub>j</sub> =25°C, I <sub>O</sub> =1mA~100mA, V <sub>i</sub> =-23V	25	150	150	mV
		T <sub>j</sub> =25°C, I <sub>O</sub> =1mA~40mA, V <sub>i</sub> =-23V	15	75	75	mV
Line regulation	ΔV <sub>O</sub>	-17.5V≤V <sub>i</sub> ≤-30V, T <sub>j</sub> =25°C, I <sub>O</sub> =40mA	65	300	300	mV
		-19V≤V <sub>i</sub> ≤-30V, T <sub>j</sub> =25°C, I <sub>O</sub> =40mA	5	250	250	mV
Quiescent Current	I <sub>Q</sub>	T <sub>j</sub> =25°C			6.5	mA
Quiescent Current Change	ΔI <sub>Q</sub>	-19V≤V <sub>i</sub> ≤-30V, I <sub>O</sub> =40mA			1.5	mA
	ΔI <sub>Q</sub>	1mA≤I <sub>O</sub> ≤40mA, V <sub>i</sub> =-23V			0.1	mA
Output Noise Voltage	V <sub>N</sub>	10Hz≤f≤100KHz	90			μV
Ripple Rejection	RR	-18.5V≤V <sub>i</sub> ≤-28.5V, f=120Hz, 25°C≤T <sub>j</sub> ≤125°C	34	39		dB
Dropout Voltage	V <sub>d</sub>	T <sub>j</sub> =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.