



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

## TO-220 Encapsulate Voltage Regulator

**CJ7908** Three-terminal positive voltage regulator

## FEATURES

Maximum Output current

I<sub>OM</sub>: 1.5 A

Output voltage

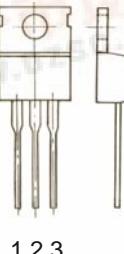
V<sub>o</sub> : -8 V

TO—220

1 GND

2. .IN

3.OUT



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

Parameter	Symbol	Value	Unit
Input Voltage	V <sub>i</sub>	-35	V
Operating Junction Temperature Range	T <sub>OPR</sub>	-20~+125	°C
Storage Temperature Range	T <sub>STG</sub>	-55~+150	°C

ELECTRICAL CHARACTERISTICS(V<sub>i</sub>=-23V,I<sub>o</sub>=500mA,0°C< T<sub>j</sub><125°C,C<sub>i</sub>=0.33 μ F,C<sub>o</sub>=0.1 μ F, unless otherwise specified )

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Output voltage	V <sub>o</sub>	T <sub>j</sub> =25°C	-7.7	-8	-8.3	V
		-10.5V≤V <sub>i</sub> ≤-23V, I <sub>o</sub> =5mA-1A P <sub>o</sub> < 15W	-7.6	-8	-8.4	V
Load Regulation	△V <sub>o</sub>	T <sub>j</sub> =25°C, I <sub>o</sub> =5mA-1.5A		15	160	mV
		T <sub>j</sub> =25°C, I <sub>o</sub> =250mA-750mA		5	80	mV
Line regulation	△V <sub>o</sub>	-10.5V≤V <sub>i</sub> ≤-25V, T <sub>j</sub> =25°C		12.5	160	mV
		-11V≤V <sub>i</sub> ≤-17V, T <sub>j</sub> =25°C		4	80	mV
Quiescent Current	I <sub>q</sub>	T <sub>j</sub> =25°C		1.5	2	mA
Quiescent Current Change	△I <sub>q</sub>	-10.5V≤V <sub>i</sub> ≤-25V			1	mA
	△I <sub>q</sub>	5mA≤I <sub>o</sub> ≤1A			0.5	mA
Output Noise Voltage	V <sub>N</sub>	10Hz≤f≤100KHz		200		μ V
Ripple Rejection	RR	-11.5V≤V <sub>i</sub> ≤-21.5V,f=120Hz,T <sub>j</sub> =25°C	54	60		dB
Dropout Voltage	V <sub>d</sub>	T <sub>j</sub> =25°C, I <sub>o</sub> =1A			1.1	V
Peak Current	I <sub>pk</sub>	T <sub>j</sub> =25°C			2.1	A

## TYPICAL APPLICATION

