



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

TO-220F Plastic-Encapsulate Voltage Regulator

CJ7908F Three-terminal negative voltage regulator

FEATURES

Maximum Output Current

I_{OM} : 1.5 A

Output voltage

V_o : -8 V

TO-220F



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}	-65-+150	°C

ELECTRICAL CHARACTERISTICS ($V_i = -14V$, $I_o = 500mA$, $0^\circ C < T_J < 125^\circ C$, $C_i = 2 \mu F$, $C_o = 0.1 \mu F$, unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Output voltage	V_o	$T_J = 25^\circ C$	-7.7	-8	-8.3	V
		$-10.5V \leq V_i \leq -23V$, $I_o = 5mA-1A$, $P \leq 15W$	-7.6	-8	-8.4	V
Load Regulation	ΔV_o	$T_J = 25^\circ C$, $I_o = 5mA-1.5A$		15	160	mV
		$T_J = 25^\circ C$, $I_o = 250mA-750mA$		5	80	mV
Line regulation	ΔV_o	$-10.5V \leq V_i \leq -25V$, $T_J = 25^\circ C$		12.5	160	mV
		$-11V \leq V_i \leq -17V$, $T_J = 25^\circ C$		4	80	mV
Quiescent Current	I_q	$T_J = 25^\circ C$		1.5	2	mA
Quiescent Current Change	ΔI_q	$-10.5V \leq V_i \leq -25V$		0.15	1	mA
	ΔI_q	$5mA \leq I_o \leq 1A$		0.08	0.5	mA
Output Noise Voltage	V_N	$10Hz \leq f \leq 100KHz$		200		μV
Ripple Rejection	RR	$-11.5V \leq V_i \leq -21.5V$, $f = 120Hz$, $T_J = 25^\circ C$	54	60		dB
Dropout Voltage	V_d	$T_J = 25^\circ C$, $I_o = 1A$		1.1		V
Peak Current	I_{pk}	$T_J = 25^\circ C$		2.1		A

TYPICAL APPLICATION

