



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

TO-252-2L/TO-251 Plastic-Encapsulate Voltage Regulator

CJ7905 Three-terminal negative voltage regulator

TO-251
TO-252-2L



1.IN
2.GND
3.OUT



FEATURES

Maximum Output current I_{OM} : 1.5 A

Output voltage V_o : - 5V

Continuous total dissipation

P_D : 1.25 W ($T_J = 25^\circ C$)

15 W ($T_C = 25^\circ C$)

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	$^\circ C$
Storage Temperature Range	T_{STG}	-65-150	$^\circ C$

ELECTRICAL CHARACTERISTICS($V_i = -23V, I_o = 500mA, 0^\circ C < T_J < 125^\circ C, C_i = 0.33 \mu F, C_o = 0.1 \mu F$, unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Output voltage	V_o	$T_J = 25^\circ C$	-4.8	-5	-5.2	V
		$-7V \leq V_i \leq -20V, I_o = 5mA-1A, P \leq 15W$	-4.75	-5	-5.25	V
Load Regulation	ΔV_o	$T_J = 25^\circ C, I_o = 5mA-1.5A$		15	100	mV
		$T_J = 25^\circ C, I_o = 250mA-750mA$		5	50	mV
Line regulation	ΔV_o	$-7V \leq V_i \leq -25V, T_J = 25^\circ C$		12.5	50	mV
		$-8V \leq V_i \leq -12V, T_J = 25^\circ C$		4	15	mV
Quiescent Current	I_q	$T_J = 25^\circ C$		1.5	2	mA
Quiescent Current Change	ΔI_q	$-7V \leq V_i \leq -25V$			0.5	mA
	ΔI_q	$5mA \leq I_o \leq 1A$			0.5	mA
Output Noise Voltage	V_N	$10Hz \leq f \leq 100KHz$		125		μV
Ripple Rejection	RR	$-8V \leq V_i \leq -18V, f = 120Hz, T_J = 25^\circ C$	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

