



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

TO-220F Plastic-Encapsulate Voltage Regulator

CJ7912F Three-terminal negative voltage regulator

FEATURES

Maximum Output Current

I_{OM} : 1.5 A

Output voltage

V_o : 12 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+125	°C
Storage Temperature Range	T_{STG}	-55+150	°C

ELECTRICAL CHARACTERISTICS ($V_i = -19V$, $I_o = 500mA$, $0^\circ C < T_J < 125^\circ C$, $C_i = 2\mu F$, $C_o = 0.1\mu F$, unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Output voltage	V_o	$T_J = 25^\circ C$	-11.5	-12	-12.5	V
		$-14.5V \leq V_i \leq -27V$, $I_o = 5mA-1A$, $P \leq 15W$	-11.4	-12	-12.6	V
Load Regulation	ΔV_o	$T_J = 25^\circ C$, $I_o = 5mA-1.5A$		15	200	mV
		$T_J = 25^\circ C$, $I_o = 250mA-750mA$		5	75	mV
Line regulation	ΔV_o	$-14.5V \leq V_i \leq -30V$, $T_J = 25^\circ C$		5	80	mV
		$-16V \leq V_i \leq -22V$, $T_J = 25^\circ C$		3	30	mV
Quiescent Current	I_q	$T_J = 25^\circ C$		2	3	mA
Quiescent Current Change	ΔI_q	$-14.5V \leq V_i \leq -30V$			0.5	mA
	ΔI_q	$5mA \leq I_o \leq 1A$			0.5	mA
Output Noise Voltage	V_N	$10Hz \leq f \leq 100KHz$		300		μV
Ripple Rejection	RR	$-15V \leq V_i \leq -25V$, $f = 120Hz$, $T_J = 25^\circ C$	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

