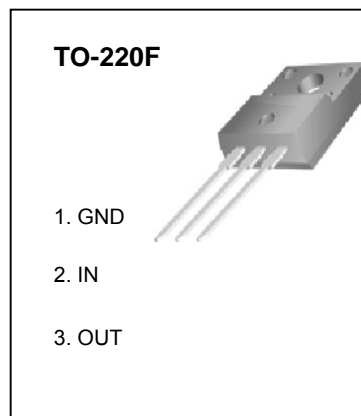




## TO-220F Plastic-Encapsulate Voltage Regulator

**CJ7912F** Three-terminal negative voltage regulator



### FEATURES

Maximum Output Current

$I_{OM}$ : 1.5 A

Output voltage

$V_o$ : 12 V

### 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	$\Delta V_o$	$T_J = 25^\circ C$ , $I_o = 5mA-1.5A$		15	200	mV
		$T_J = 25^\circ C$ , $I_o = 250mA-750mA$		5	75	mV
Line regulation	$\Delta V_o$	$-14.5V \leq V_i \leq -30V$ , $T_J = 25^\circ C$		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	$\Delta I_q$	$-14.5V \leq V_i \leq -30V$			0.5	mA
	$\Delta I_q$	$5mA \leq I_o \leq 1A$			0.5	mA
Output Noise Voltage	$V_N$	$10Hz \leq f \leq 100KHz$		300		$\mu V$
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

