



## TO-220F Plastic-Encapsulate Voltage Regulator

### CJ7905F Three-terminal negative voltage regulator

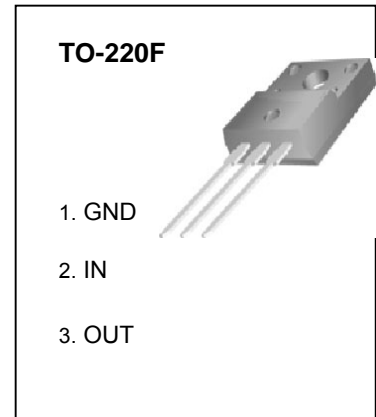
#### FEATURES

Maximum Output Current

$I_{OM}$ : 1.5 A

Output voltage

$V_o$ : -5 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-+150	°C
Storage Temperature Range	$T_{STG}$	-65-+150	°C

#### ELECTRICAL CHARACTERISTICS ( $V_i = -10V$ , $I_o = 500mA$ , $0^\circ C < T_J < 125^\circ C$ , $C_i = 2 \mu F$ , $C_o = 0.1 \mu F$ , unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Output voltage	$V_o$	$T_J = 25^\circ C$	-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	$\Delta V_o$	$T_J = 25^\circ C$ , $I_o = 5mA-1.5A$		15	100	mV
		$T_J = 25^\circ C$ , $I_o = 250mA-750mA$		5	50	mV
Line regulation	$\Delta V_o$	$-7V \leq V_i \leq -25V$ , $T_J = 25^\circ C$		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	$\Delta I_q$	$-7V \leq V_i \leq -25V$		0.15	0.5	mA
	$\Delta I_q$	$5mA \leq I_o \leq 1A$		0.08	0.5	mA
Output Noise Voltage	$V_N$	$10Hz \leq f \leq 100KHz$		125		$\mu V$
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

