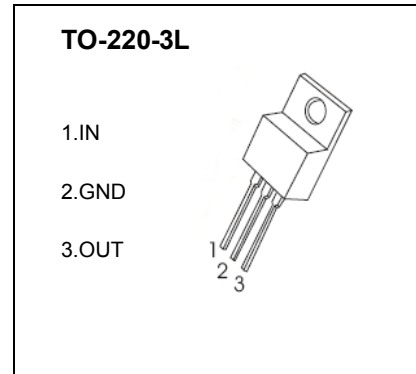


# TO-220-3L Plastic-Encapsulate Voltage Regulators

**CJ7805H** Three-terminal positive voltage regulator

## FEATURES

- Maximum pulse output current :  $I_{OM}$ : 1.5 A
- Output voltage  $V_o$ : 5V
- Continuous total dissipation is internally limited



## ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Unit
Input Voltage	$V_i$	35	V
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	83.3	$^{\circ}C/W$
Thermal Resistance from Junction to Case	$R_{\theta JC}$	8.3	$^{\circ}C/W$
Operating Junction Temperature Range	$T_{OPR}$	0~+150	$^{\circ}C$
Storage Temperature Range	$T_{STG}$	-55~+150	$^{\circ}C$

## ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE ( $V_i=10V, I_o=500mA, C_i=0.33\mu F, C_o=0.1\mu F$ , unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit	
Output voltage	$V_o$		25 $^{\circ}C$	4.8	5.0	5.2	V
	$V_o$ (Note1)	$7V \leq V_i \leq 20V, I_o=5mA-1A, P \leq 15W$	0-125 $^{\circ}C$	4.75	5.00	5.25	V
Load Regulation	$\Delta V_o$	$I_o=5mA-1.5A$	25 $^{\circ}C$		1.3	100	mV
		$I_o=250mA-750mA$	25 $^{\circ}C$		0.9	50	mV
Line regulation	$\Delta V_o$	$7V \leq V_i \leq 25V$	25 $^{\circ}C$			100	mV
		$8V \leq V_i \leq 12V$	25 $^{\circ}C$			50	mV
Quiescent Current	$I_q$		25 $^{\circ}C$	3.5	8	mA	
Quiescent Current Change	$\Delta I_q$	$7V \leq V_i \leq 25V$	0-125 $^{\circ}C$		0.3	1.3	mA
		$5mA \leq I_o \leq 1A$	0-125 $^{\circ}C$		0.03	0.5	mA
Output Noise Voltage	$V_N$	$10Hz \leq f \leq 100KHz$	25 $^{\circ}C$	42		$\mu V$	
Output voltage drift	$\Delta V_o / \Delta T$	$I_o=5mA$	0-125 $^{\circ}C$		-1.1	mV/ $^{\circ}C$	
Ripple Rejection	RR	$8V \leq V_i \leq 18V, f=120Hz$	0-125 $^{\circ}C$	62	73	dB	
Dropout Voltage	$V_d$	$I_o=1A$	25 $^{\circ}C$		2	V	
Output resistance	$R_o$	$f=1KHz$	25 $^{\circ}C$		10	m $\Omega$	
Short Circuit Current	$I_{sc}$		25 $^{\circ}C$		230	mA	
Peak Current	$I_{pk}$		25 $^{\circ}C$		2.2	A	

Note1: pulse test

## TYPICAL APPLICATION

