



# TO-220 Plastic-Encapsulate Transistors

## CJ7818 Three-terminal positive voltage regulator

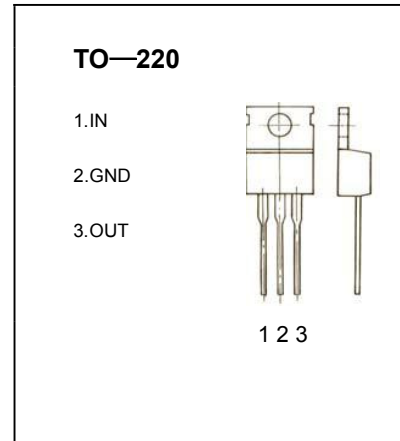
### FEATURES

Maximum Output current

$I_{OM}$ : 1.5 A

Output voltage

$V_o$ : 18V



### 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	$T_{STG}$	-65—+150	°C

### ELECTRICAL CHARACTERISTICS ( $V_i=10V, I_o=500mA, 0^\circ C < T_j < 125^\circ C, C_i=0.33 \mu F, C_o=0.1 \mu F$ , unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Output voltage	$V_o$	$T_j=25^\circ C$	17.3	18	18.7	V
		$21V \leq V_i \leq 33V, I_o=5mA-1A, P_o \leq 15W$	17.1	18	18.9	V
Load Regulation	$\Delta V_o$	$T_j=25^\circ C, I_o=5mA-1.5A$		12	360	mV
		$T_j=25^\circ C, I_o=250mA-750mA$		4	180	mV
Line regulation	$\Delta V_o$	$21V \leq V_i \leq 33V, T_j=25^\circ C$		15	360	mV
		$24V \leq V_i \leq 30V, T_j=25^\circ C$		5	180	mV
Quiescent Current	$I_q$	$T_j=25^\circ C$		4.5	8	mA
Quiescent Current Change	$\Delta I_q$	$21V \leq V_i \leq 33V$			1	mA
	$\Delta I_q$	$5mA \leq I_o \leq 1A$			0.5	mA
Output Noise Voltage	$V_n$	$10Hz \leq f \leq 100KHz$		110		uV
Ripple Rejection	RR	$22V \leq V_i \leq 32V, f=120Hz, T_j=25^\circ C$	53	69		dB
Dropout Voltage	$V_d$	$T_j=25^\circ C, I_o=1A$		2		V
Short Circuit Current	$I_{sc}$	$V_i=35V, T_a=25^\circ C$		200		mA
Peak Current	$I_{pk}$	$T_j=25^\circ C$		2.1		A

### TYPICAL APPLICATION

