



TO-220 Encapsulate Voltage Regulator

CJ7815 Three-terminal positive voltage regulator

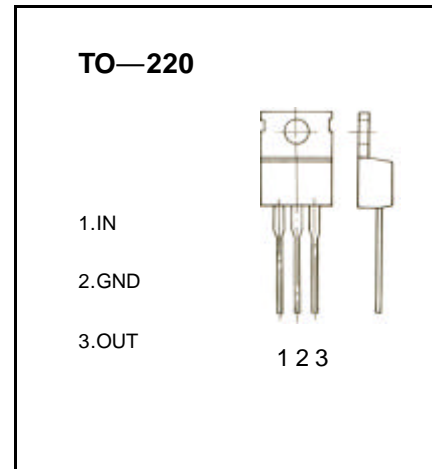
FEATURES

Maximum Output current

I_{OM} : 1.5 A

Output voltage

V_o : 15 V



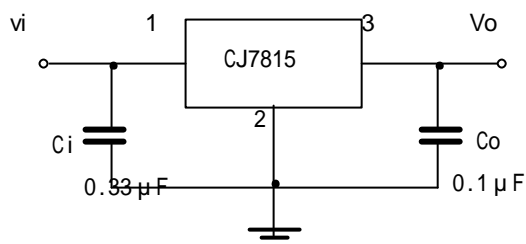
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Unit
Input Voltage	V_i	35	V
Operating Junction Temperature Range	T_{OPR}	-20-+125	
Storage Temperature Range	T_{STG}	-55-+150	

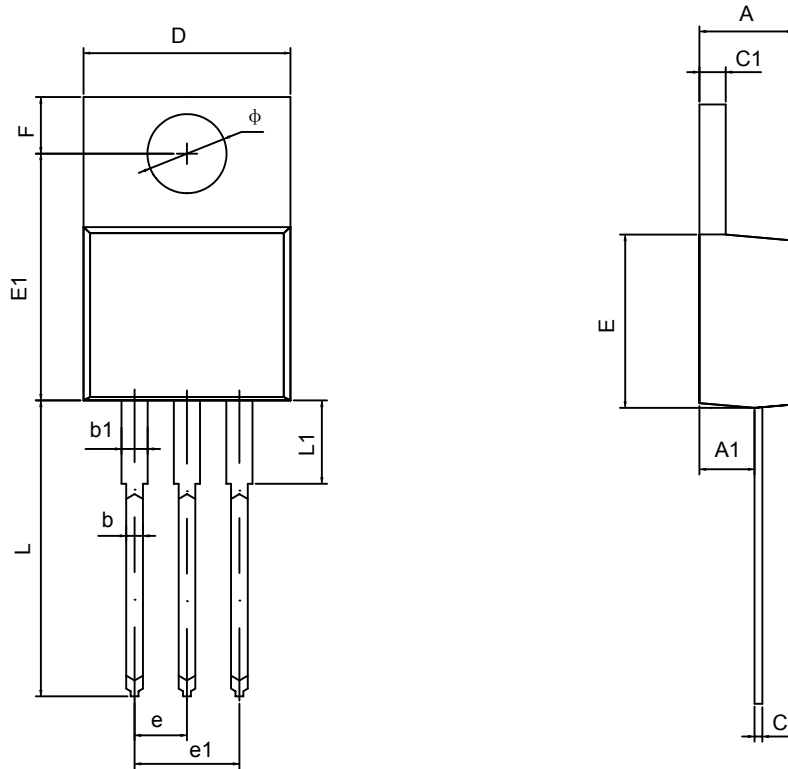
ELECTRICAL CHARACTERISTICS ($V_i=23V, I_o=500mA, 0 < T_j < 125$, $C_i=0.33 \mu F, C_o=0.1 \mu F$, unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Output voltage	V_o	$T_j=25$	14.4	15	15.6	V
		17.5V V_i 30V, $I_o=5mA-1A$ $P_o < 15W$	14.25	15	15.75	V
Load Regulation	V_o	$T_j=25$, $I_o=5mA-1.5A$		12	300	mV
		$T_j=25$, $I_o=250mA-750mA$		3	150	mV
Line regulation	V_o	17.5V V_i 30V, $T_j=25$		12	300	mV
		20V V_i 26V, $T_j=25$		3	150	mV
Quiescent Current	I_q	$T_j=25$		4.3	8	mA
Quiescent Current Change	I_q	17.5V V_i 30V			1	mA
	I_q	5mA I_o 1A			0.5	mA
Output Noise Voltage	V_n	10Hz f 100KHz		90		μV
Ripple Rejection	RR	18.5V V_i 28.5V, $f=120Hz, T_j=25$	54	70		dB
Dropout Voltage	V_d	$T_j=25$, $I_o=1A$		2		V
Short Circuit Current	I_{sc}	$T_j=25$		230		mA
Peak Current	I_{pk}	$T_j=25$		2.1		A

TYPICAL APPLICATION



TO-220-3L PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	4.470	4.670	1.176	0.184
A1	2.520	2.820	0.099	0.111
b	0.710	0.910	0.028	0.036
b1	1.170	1.370	0.046	0.054
c	0.310	0.530	0.012	0.021
c1	1.710	1.370	0.046	0.054
D	10.010	10.310	0.394	0.406
E	8.500	8.900	0.335	0.350
E1	12.060	12.460	0.475	0.491
e	2.540TYP		0.100TYP	
e1	4.980	5.180	0.196	0.204
F	2.590	2.890	0.102	0.114
L	13.400	13.800	0.528	0.543
L1	3.560	3.960	0.140	0.156
ϕ	3.790	3.890	0.149	0.153