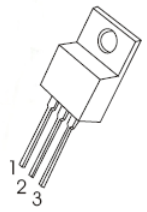
JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

TO-220-3L Plastic-Encapsulate Voltage Regulator

CJ7909 Three-terminal negative voltage regulator

TO-220-3L



FEATURES

Maximum Output current I_{OM}: 1.5 A
Output voltage V_o: - 9 V
Continuous total dissipation
P_D: 2 W (T_J = 25 ℃)
15 W (T_C= 25 ℃)

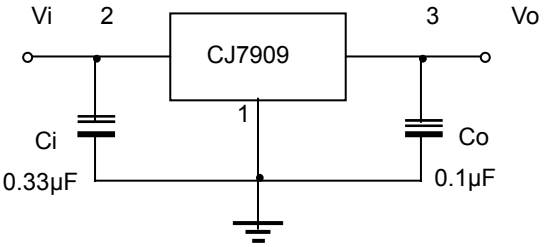
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Unit
Input Voltage	V_i	-35	V
Thermal resistance junction-air	$R_{\theta JA}$	65	℃/W
Thermal resistance junction-cases	$R_{\theta JC}$	5	℃/W
Operating Junction Temperature Range	T_{OPR}	0~+150	℃
Storage Temperature Range	T_{STG}	-55~+150	℃

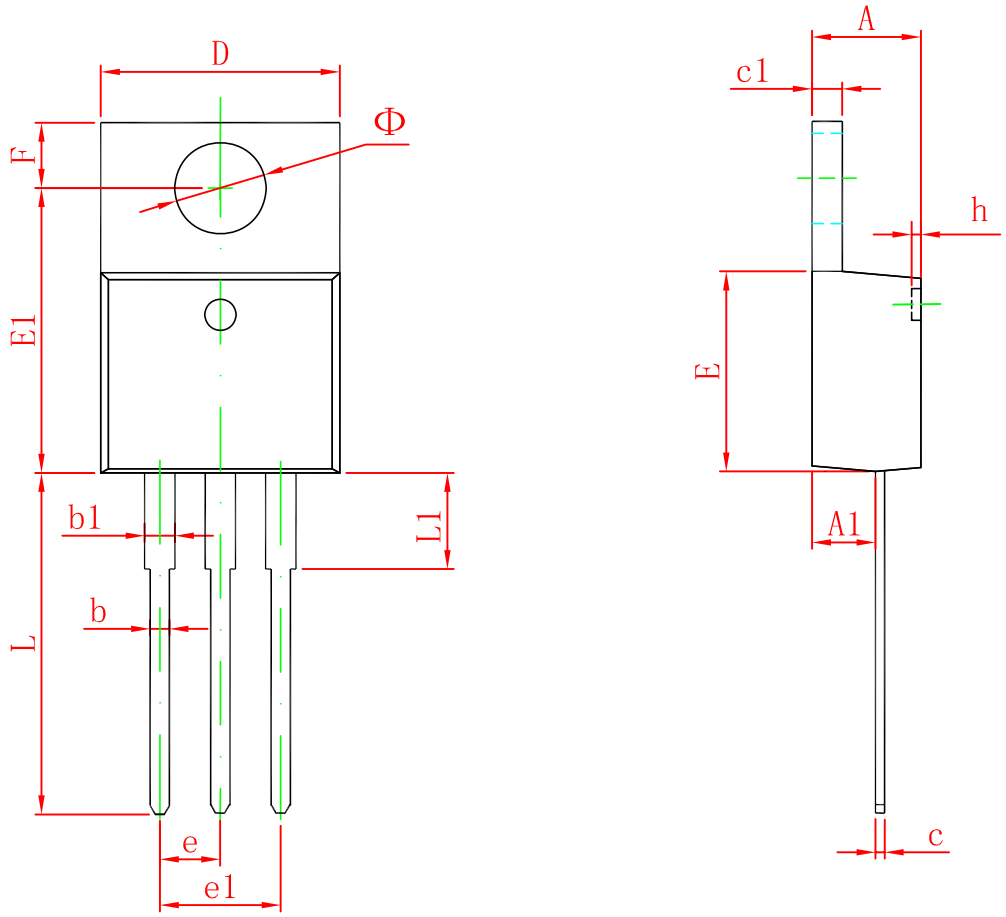
ELECTRICAL CHARACTERISTICS (Vi=-15V,Io=500mA,0℃<T_J<125℃,Ci=0.33μF,Co=0.1μF, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output voltage	Vo	T_J =25℃	-8.64	-9	-9.36	V
		-11.5V≤Vi≤-24V,Io=5mA-1A, P≤15W	-8.55	-9	-9.45	V
Load Regulation	ΔVo	T_J =25℃, Io=5mA-1.5A			180	mV
		T_J =25℃, Io=250mA-750mA			80	mV
Line regulation	ΔVo	-11.5V≤Vi≤-26V, T_J =25℃			140	mV
		-13V≤Vi≤-19V, T_J =25℃			70	mV
Quiescent Current	Iq	T_J =25℃		1.6	2.6	mA
Quiescent Current Change	ΔIq	-11.5V≤Vi≤-26V			1	mA
	ΔIq	5mA≤I_O≤1A			0.5	mA
Ripple Rejection	RR	-12.5V≤Vi≤-22.5V ,f=120Hz	54	60		dB
Dropout Voltage	Vd	T_J =25℃, Io=1A		1.1		V
Peak output Current	Ipk	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	0.176	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	1.170	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	2.540 TYP		0.100 TYP	
e1	4.980	5.180	0.196	0.204
F	2.590	2.890	0.102	0.114
h	0.000	0.300	0.000	0.012
L	13.400	13.800	0.528	0.543
L1	3.560	3.960	0.140	0.156
Φ	3.735	3.935	0.147	0.155