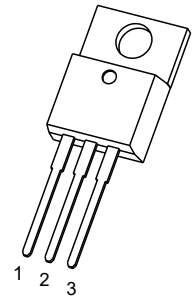
TO-220-3L Plastic-Encapsulate Voltage Regulator

CJ7909 Three-terminal negative voltage regulator

FEATURES

- Maximum output current
  I_{OM}: 1.5 A
- Output voltage
  V_O:- 9 V
- Continuous total dissipation
  P_D: 1.5 W (T_a= 25 ℃)

TO-220-3L



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

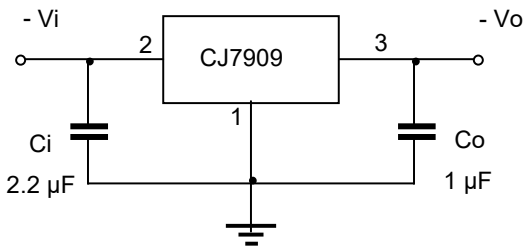
Parameter	Symbol	Value	Unit
Input Voltage	V	-35	V
Thermal Resistance from Junction to Air	$R_{\theta JA}$	83.3	℃/W
Operating Junction Temperature Range	T_{OPR}	-40~+125	℃
Storage Temperature Range	T_{STG}	-65~+150	℃

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JINCTION TEMPERATURE(Vi=-15V,Io=500mA,C_i=2.2μF, C_o=1μF, unless otherwise specified)

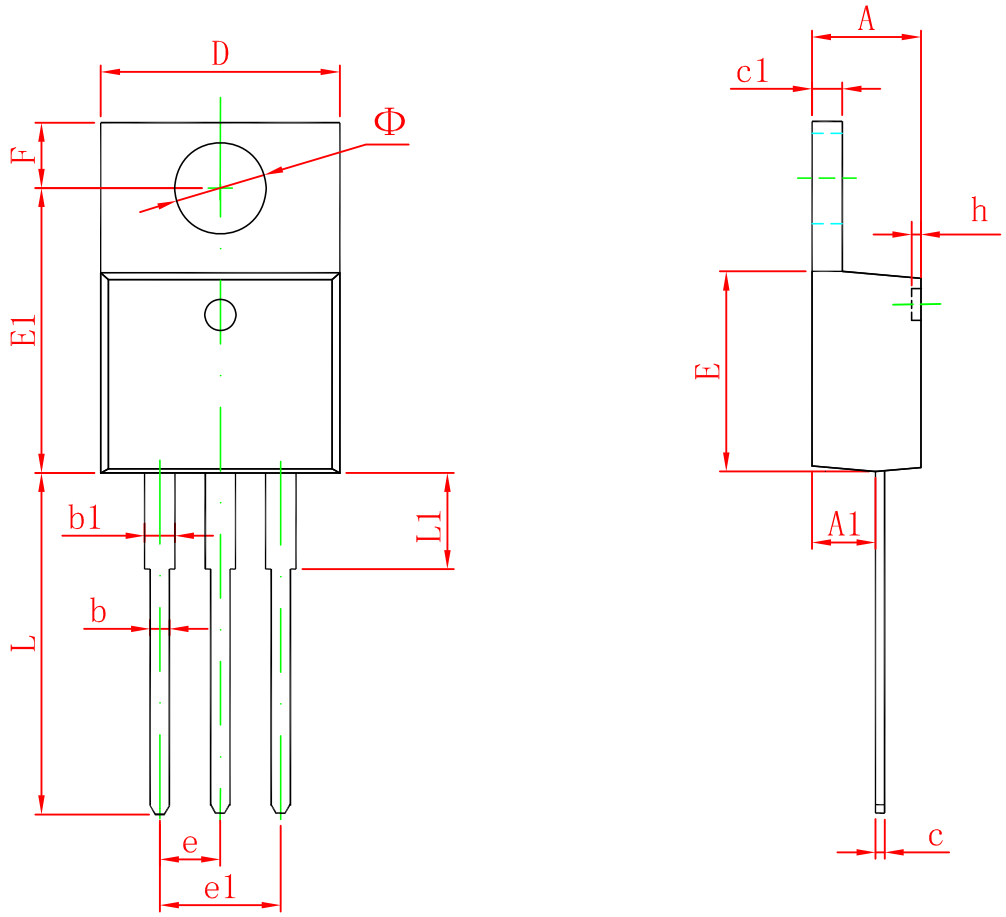
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output Voltage	Vo	T_J=25℃	-8.73	-9	-9.27	V
		-11.5V≤Vi≤-24V,Io=5mA-1A	-8.55	-9	-9.45	V
Load Regulation	ΔVo	Io=5mA-1.5A ,T_J=25℃			180	mV
		Io=250mA-750mA ,T_J=25℃			80	mV
Line Regulation	ΔVo	-11.5V≤Vi≤-26V ,T_J=25℃			140	mV
		-13V≤Vi≤-19V ,T_J=25℃			70	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	-11.5V≤Vi≤-21.5V,f=120Hz	54	60		dB
Dropout Voltage	Vd	Io=1A ,T_J=25℃		1.1		V
Peak Current	Ipk	T_J=25℃		2.1		A

* Pulse test.

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