

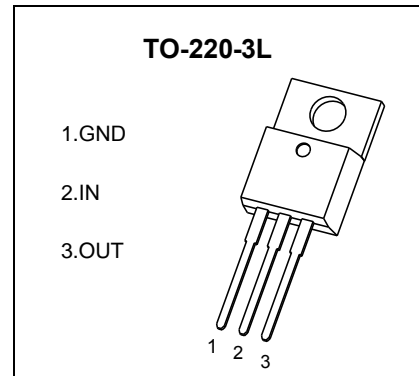


TO-220-3L Plastic-Encapsulate Voltage Regulators

CJ7908 Three-terminal negative voltage regulator

FEATURES

- Maximum output current
I_{OM}: 1.5 A
- Output voltage
V_O: -8V
- Continuous total dissipation
P_D: 1.5 W (T_a= 25 °C)



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

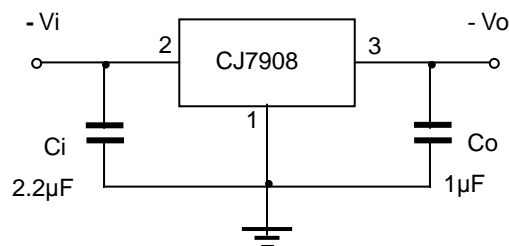
Parameter	Symbol	Value	Unit
Input Voltage	V _i	-35	V
Thermal Resistance from Junction to Air	R _{θJA}	83.3	°C/W
Operating Junction Temperature Range	T _{OPR}	0~+150	°C
Storage Temperature Range	T _{STG}	-65~+150	°C

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE (V_i=-14V, I_o=500mA, C_i=2.2μF, C_o=1μF, unless otherwise specified)

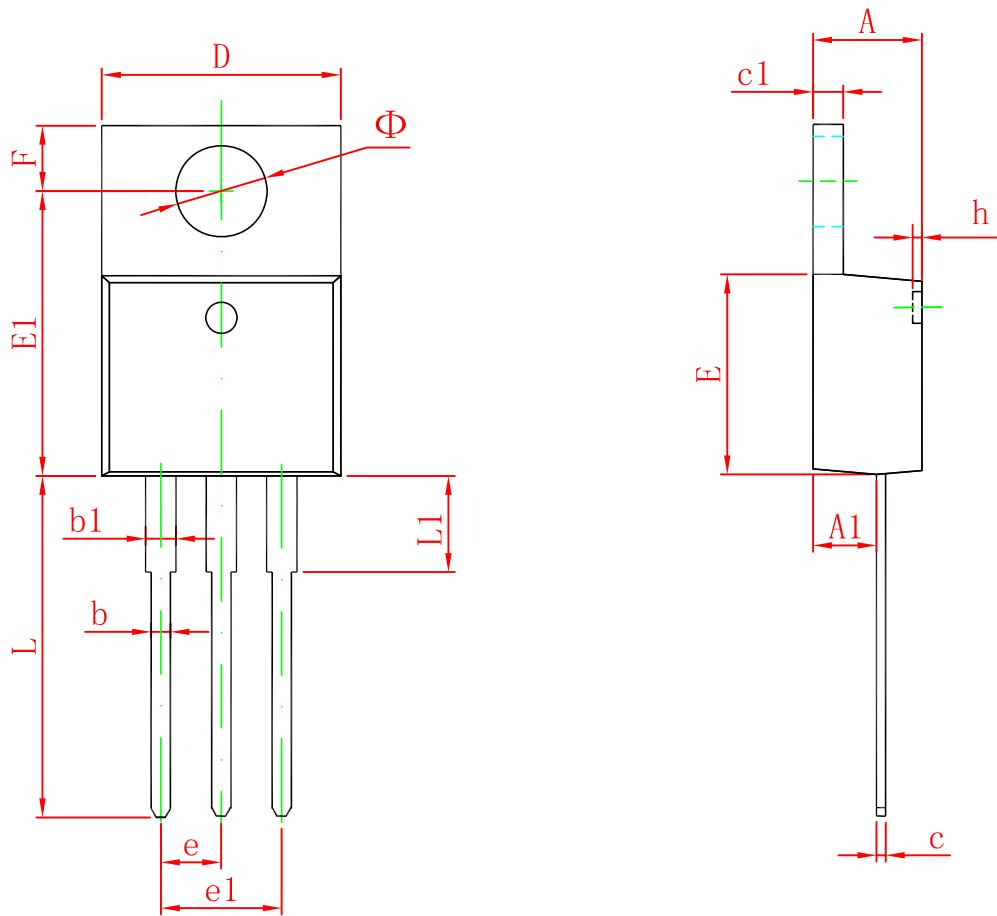
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output Voltage	V _o	25°C	-7.68	-8	-8.32	V
		-10.5V ≤ V _i ≤ -23V, I _o =5mA-1A	0-125°C	-7.6	-8	-8.4
Load Regulation	ΔV _o	I _o =5mA-1.5A	25°C	15	160	mV
		I _o =250mA-750mA	25°C	5	80	mV
Line Regulation	ΔV _o	-10.5V ≤ V _i ≤ -25V	25°C	12.5	160	mV
		-11V ≤ V _i ≤ -17V	25°C	4	80	mV
Quiescent Current	I _q	25°C		1.5	2	mA
Quiescent Current Change	ΔI _q	-10.5V ≤ V _i ≤ -25V	0-125°C		1	mA
	ΔI _q	5mA ≤ I _o ≤ 1A	0-125°C		0.5	mA
Output Noise Voltage	V _N	10Hz ≤ f ≤ 100KHz	25°C	200		μV/V _o
Output Voltage drift	ΔV _o /ΔT	I _o =5mA	0-125°C	-0.6		mV/°C
Ripple Rejection	RR	-11.5V ≤ V _i ≤ -21.5V, f=120Hz	0-125°C	54	60	dB
Dropout Voltage	V _d	I _o =1A	25°C	1.1		V
Peak Current	I _{pk}	25°C		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