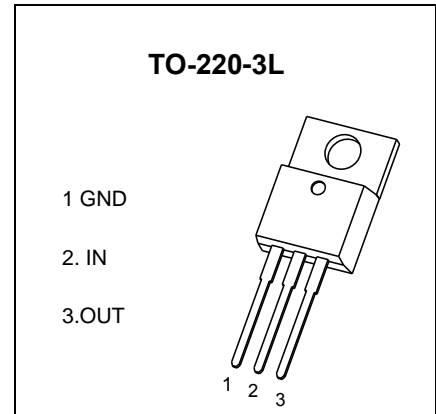


TO-220-3L Plastic-Encapsulate Voltage Regulator

CJ7915 Three-terminal negative voltage regulator

FEATURES

- Maximum output current
I_{OM}: 1.5 A
- Output voltage
V_O: -15 V
- Continuous total dissipation
P_D: 1.5 W (T_a= 25 °C)



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

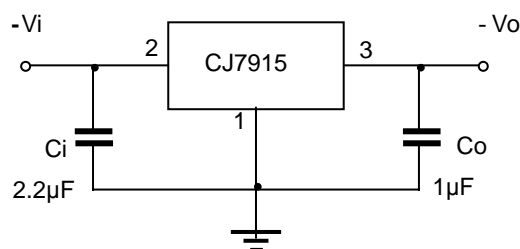
Parameter	Symbol	Value	Unit
Input Voltage	V _i	-35	V
Thermal Resistance from Junction to Air	R _{θJA}	83.3	°C/W
Operating Junction Temperature Range	T _{OPR}	-40~+125	°C
Storage Temperature Range	T _{STG}	-65~+150	°C

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE (V_i=-23V, I_o=500mA, C_i=2.2μF, C_o=1μF, unless otherwise specified)

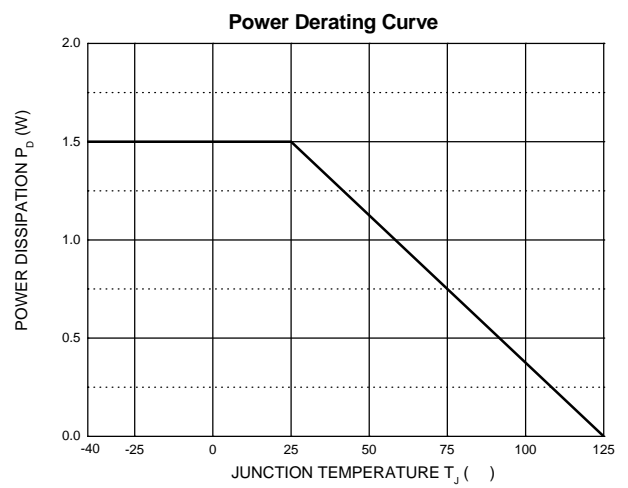
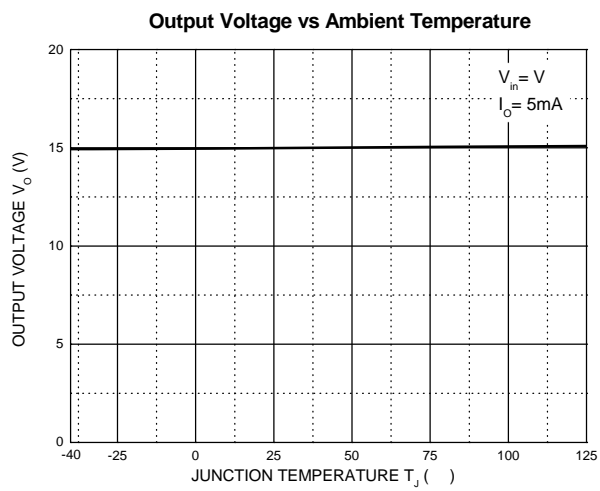
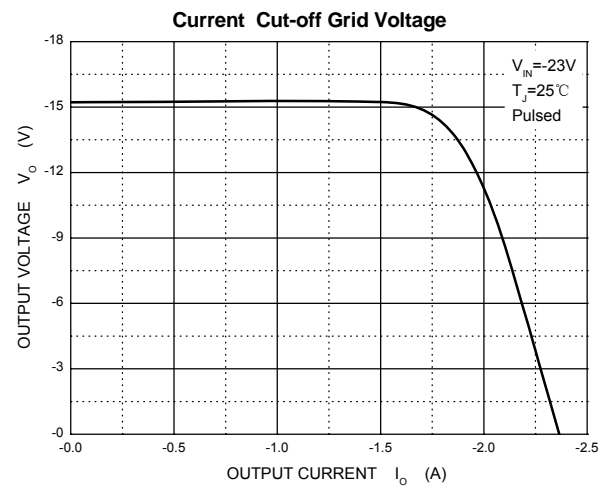
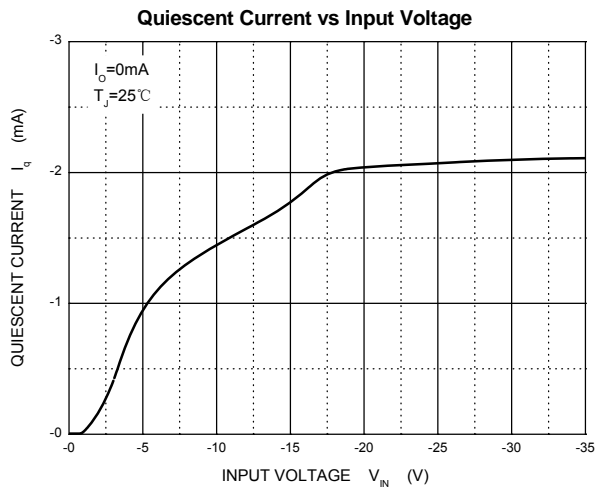
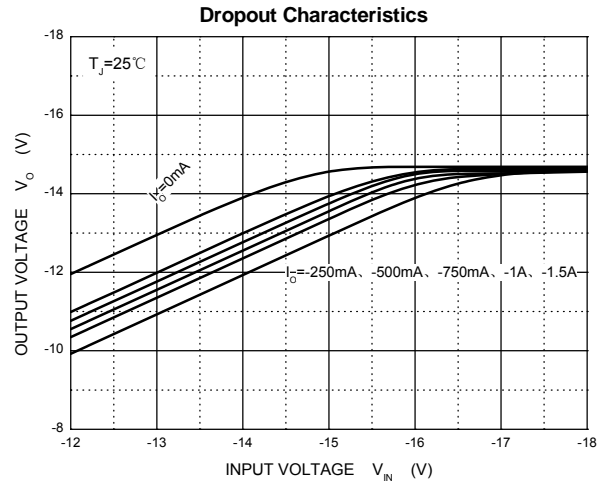
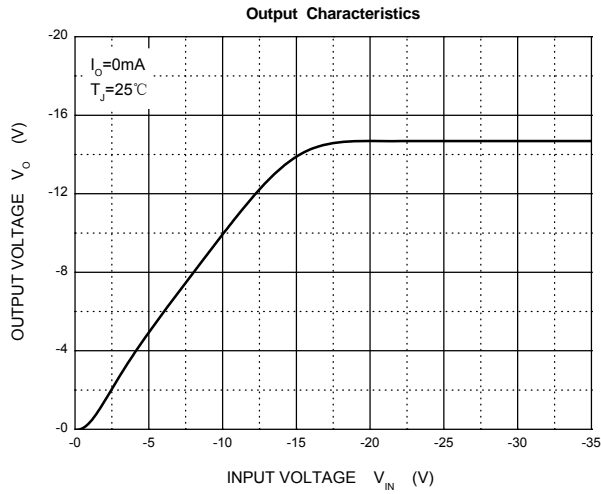
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output voltage	V _o	T _J =25°C	-14.55	-15	-15.45	V
		-17.5V ≤ V _i ≤ -30V, I _o =5mA-1A	-14.25	-15	-15.75	V
Load regulation	ΔV _o	I _o =5mA-1.5A, T _J =25°C		15	200	mV
		I _o =250mA-750mA, T _J =25°C		5	75	mV
Line regulation	ΔV _o	-17.5V ≤ V _i ≤ -30V, T _J =25°C		5	100	mV
		-20V ≤ V _i ≤ -26V, T _J =25°C		3	50	mV
Quiescent current	I _q	T _J =25°C		2	3	mA
Quiescent current change	ΔI _q	-17.5V ≤ V _i ≤ -30V			0.5	mA
	ΔI _q	5mA ≤ I _o ≤ 1A			0.5	mA
Output noise voltage	V _N	10Hz ≤ f ≤ 100KHz, T _J =25°C		375		μV/V _o
Output voltage drift	ΔV _o /ΔT	I _o =5mA		-1		mV/°C
Ripple rejection	RR	-18.5V ≤ V _i ≤ -28.5V, f=120Hz	54	60		dB
Dropout voltage	V _d	I _o =1A, T _J =25°C		1.1		V
Peak current	I _{pk}	T _J =25°C		2.1		A

* Pulse test.

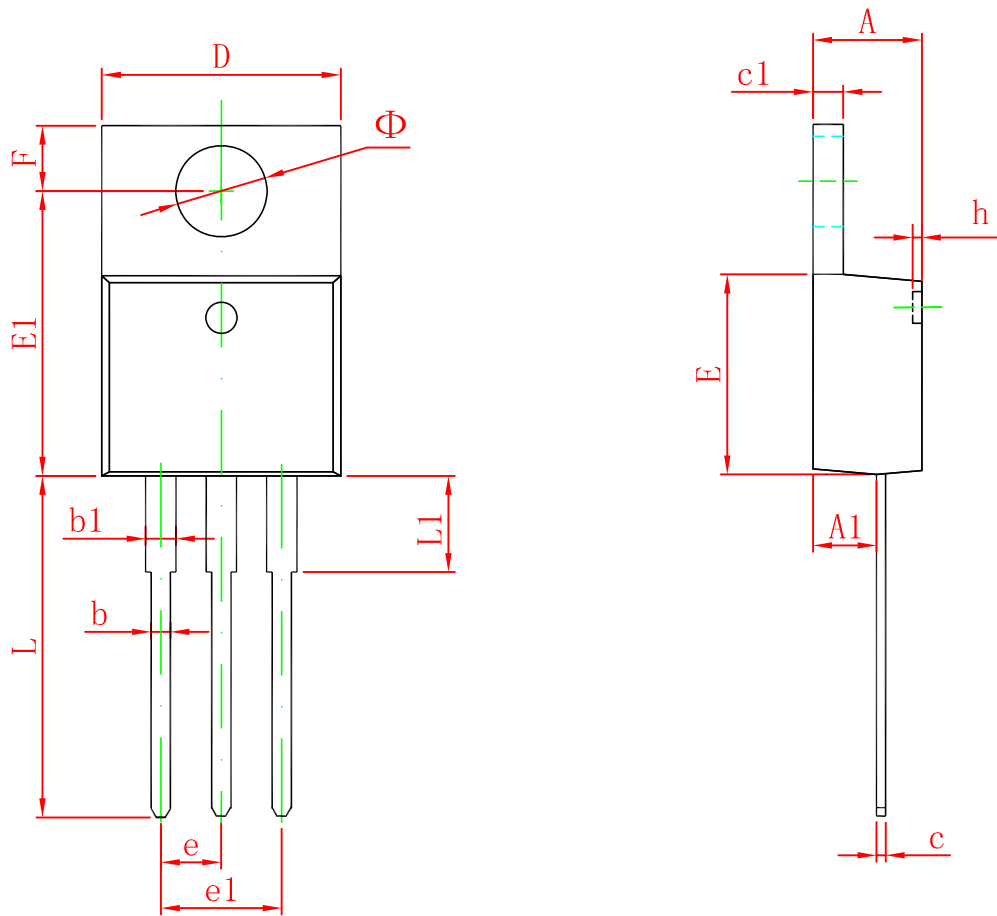
TYPICAL APPLICATION



Typical Characteristics



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