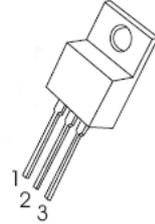


TO-220-3L Plastic-Encapsulate Voltage Regulator

CJ7915 Three-terminal negative voltage regulator

TO-220-3L

1 GND
2. IN
3.OUT



FEATURES

Maximum Output current I_{OM} : 1.5 A
Output voltage V_o : - 15 V
Continuous total dissipation
 P_D : 1.5 W ($T_a = 25^\circ C$)
15 W ($T_c = 25^\circ C$)

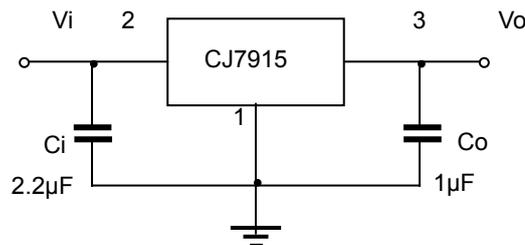
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Unit
Input Voltage	V_i	-35	V
Thermal Resistance Junction-Air	$R_{\theta JA}$	83.3	$^\circ C/W$
Thermal Resistance Junction-Case	$R_{\theta JC}$	8.33	$^\circ C/W$
Operating Junction Temperature Range	T_{OPR}	0~150	$^\circ C$
Storage Temperature Range	T_{STG}	-55~+150	$^\circ C$

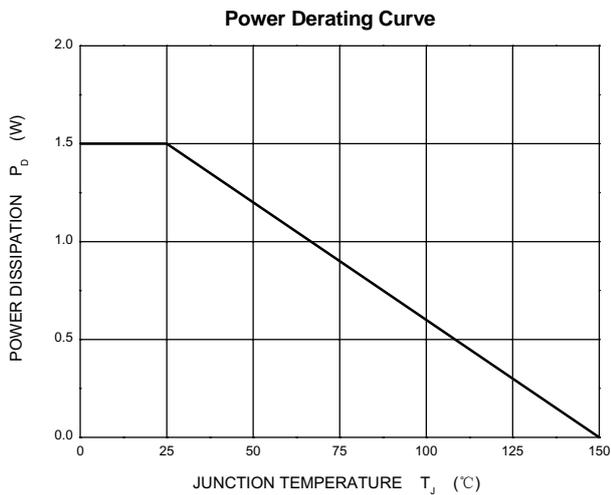
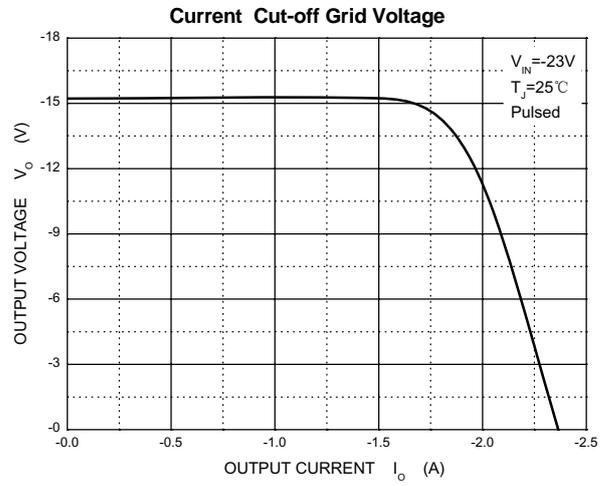
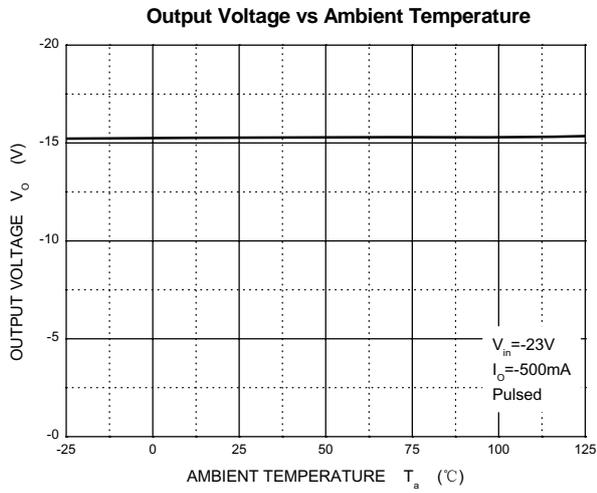
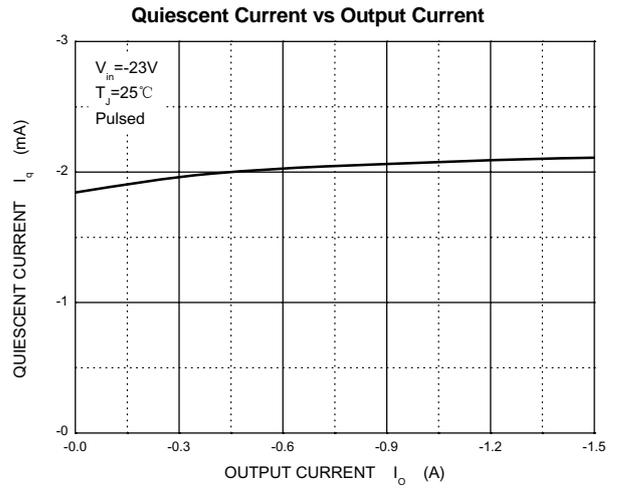
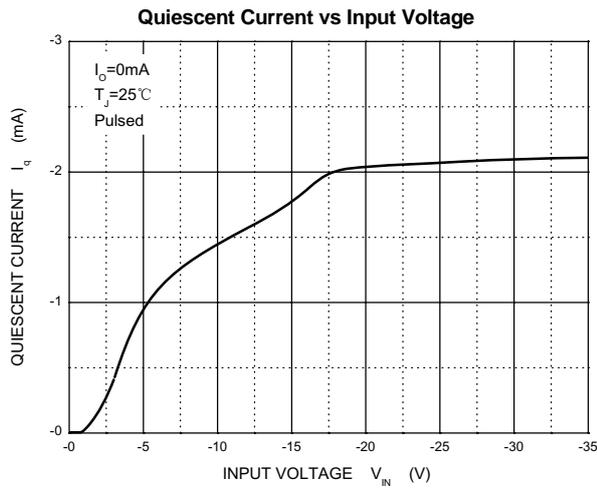
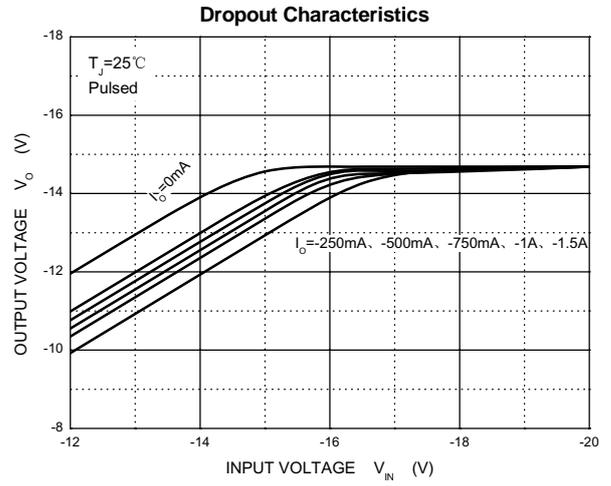
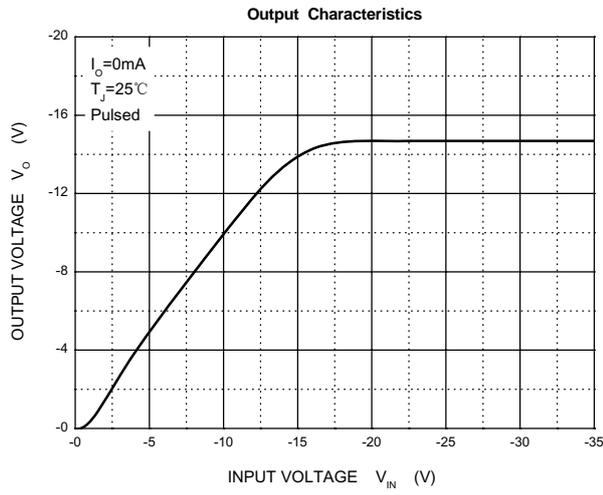
ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE ($V_i = -23V, I_o = 500mA, C_i = 2.2\mu F, C_o = 1\mu F$, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output voltage	V_o	$25^\circ C$	-14.4	-15	-15.6	V
		$-17.5V \leq V_i \leq -30V, I_o = 5mA - 1A, P \leq 15W$	0-125 $^\circ C$	-14.25	-15	-15.75
Load regulation	ΔV_o	$I_o = 5mA - 1.5A$	$25^\circ C$	15	200	mV
		$I_o = 250mA - 750mA$	$25^\circ C$	5	75	mV
Line regulation	ΔV_o	$-17.5V \leq V_i \leq -30V$	$25^\circ C$	5	100	mV
		$-20V \leq V_i \leq -26V$	$25^\circ C$	3	50	mV
Quiescent current	I_q	$25^\circ C$		2	3	mA
Quiescent current change	ΔI_q	$-17.5V \leq V_i \leq -30V$	0-125 $^\circ C$		0.5	mA
	ΔI_q	$5mA \leq I_o \leq 1A$	0-125 $^\circ C$		0.5	mA
Output noise voltage	V_N	$10Hz \leq f \leq 100KHz$	$25^\circ C$	375		μV
Output voltage drift	$\Delta V_o / \Delta T$	$I_o = 5mA$	0-125 $^\circ C$	-1		mV/ $^\circ C$
Ripple rejection	RR	$-18.5V \leq V_i \leq -28.5V, f = 120Hz$	0-125 $^\circ C$	54	60	dB
Dropout voltage	V_d	$I_o = 1A$	$25^\circ C$	1.1		V
Peak current	I_{pk}	$25^\circ C$		2.1		A

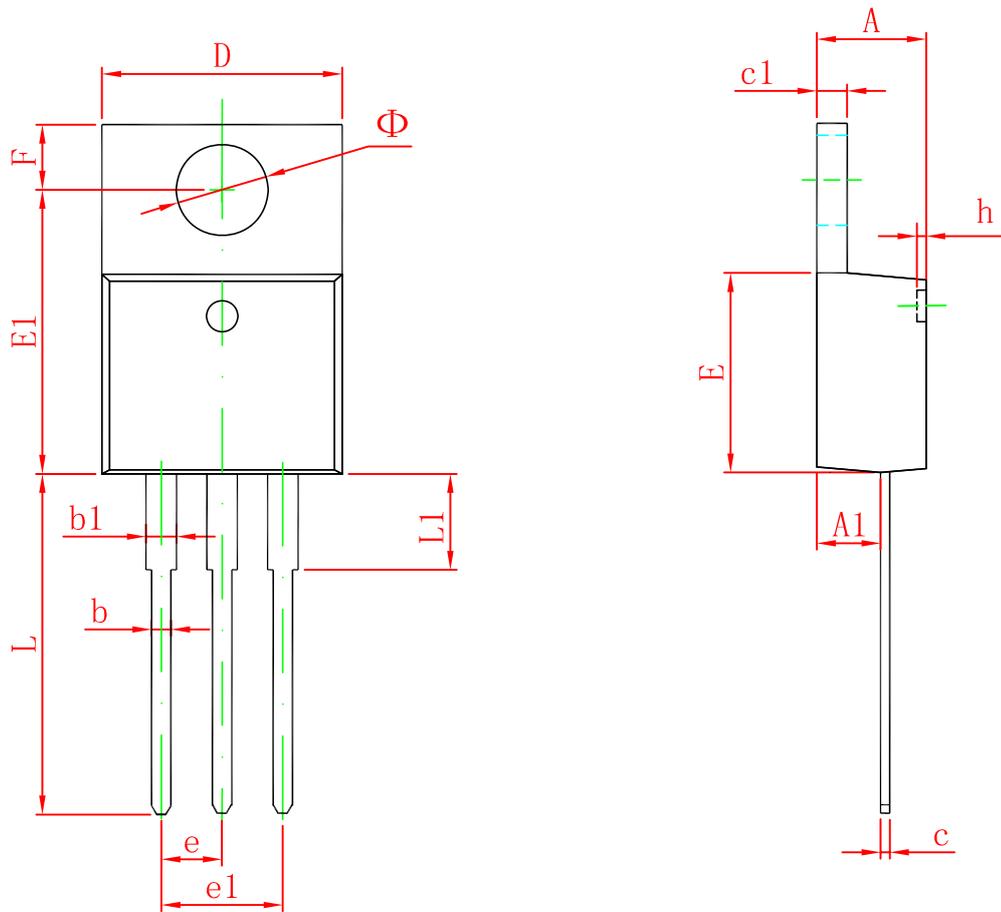
TYPICAL APPLICATION



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