

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 ($T_a = 25^\circ\text{C}$)

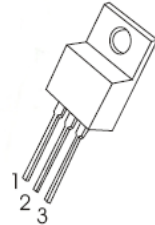
15 W ($T_c = 25^\circ\text{C}$)

TO-220-3L

1 GND

2. IN

3. OUT



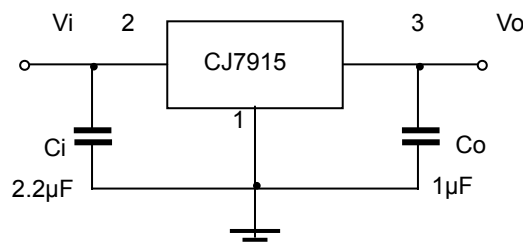
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

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

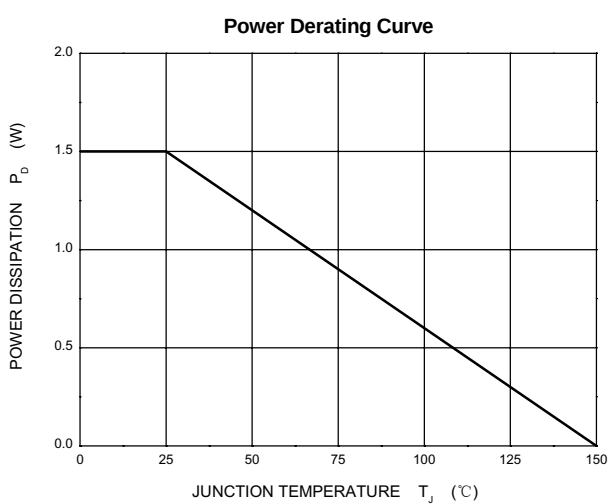
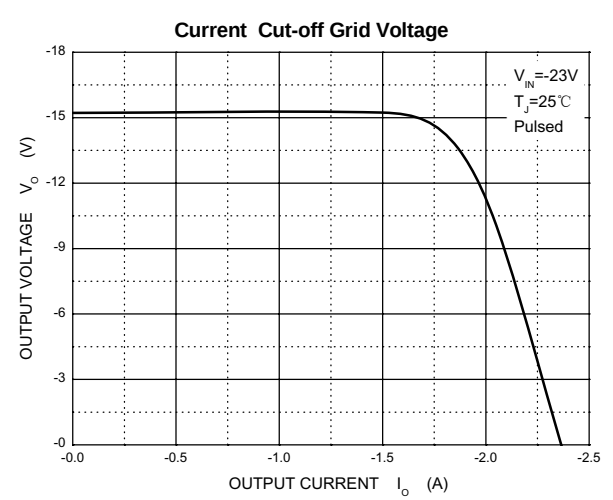
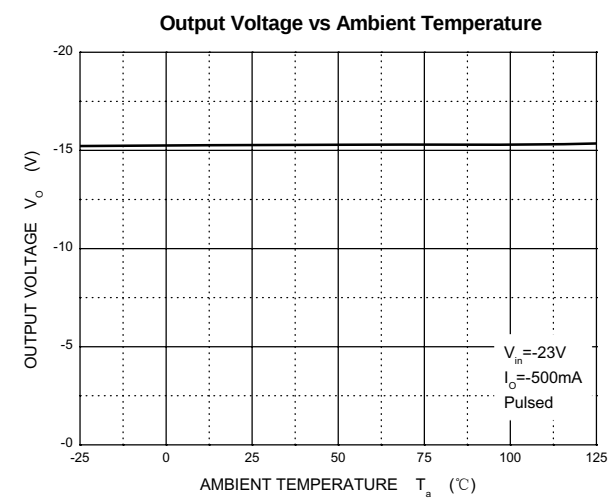
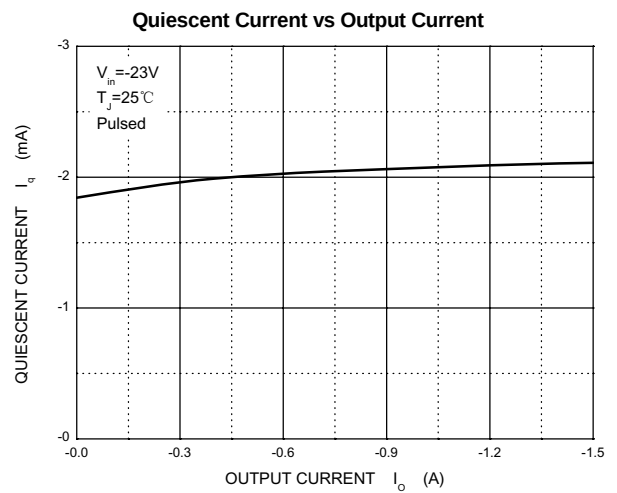
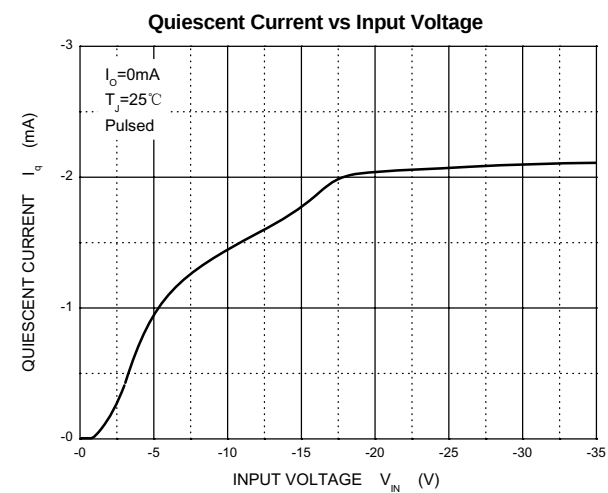
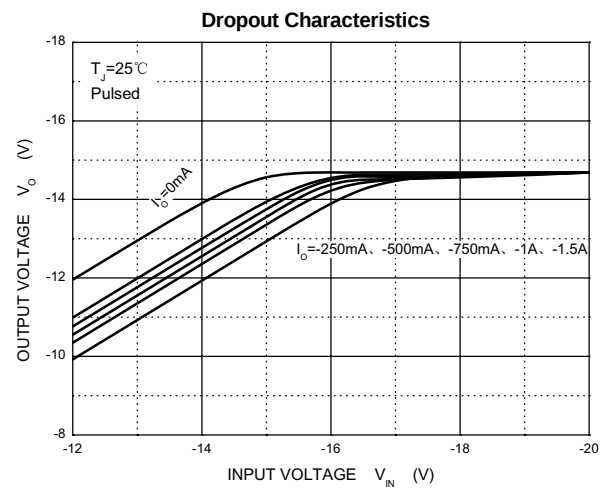
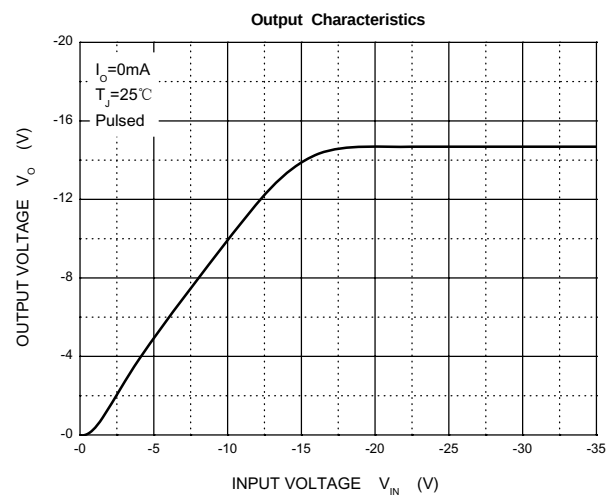
ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE ($V_i = -23\text{V}$, $I_o = 500\text{mA}$, $C_i = 2.2\mu\text{F}$, $C_o = 1\mu\text{F}$, unless otherwise specified)

Parameter	Symbol	Test conditions		Min	Typ	Max	Unit
Output voltage	Vo		25°C	-14.4	-15	-15.6	V
		-17.5V≤Vi≤-30V, Io=5mA-1A, P≤ 15W	0-125°C	-14.25	-15	-15.75	V
Load regulation	ΔVo	Io=5mA-1.5A	25°C		15	200	mV
		Io=250mA-750mA	25°C		5	75	mV
Line regulation	ΔVo	-17.5V≤Vi≤-30V	25°C		5	100	mV
		-20V≤Vi≤-26V	25°C		3	50	mV
Quiescent current	Iq		25°C		2	3	mA
Quiescent current change	ΔIq	-17.5V≤Vi≤-30V	0-125°C			0.5	mA
	ΔIq	5mA≤Io≤1A	0-125°C			0.5	mA
Output noise voltage	VN	10Hz≤f≤100KHz	25°C		375		μV
Output voltage drift	ΔVo/ΔT	Io=5mA	0-125°C		-1		mV/°C
Ripple rejection	RR	-18.5V≤Vi≤-28.5V,f=120Hz	0-125°C	54	60		dB
Dropout voltage	Vd	Io=1A	25°C		1.1		V
Peak current	Ipk		25°C		2.1		A

TYPICAL APPLICATION



Typical Characteristics



www.cj-elec.com



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