HFZT

7915

Three-terminal positive voltage regulator

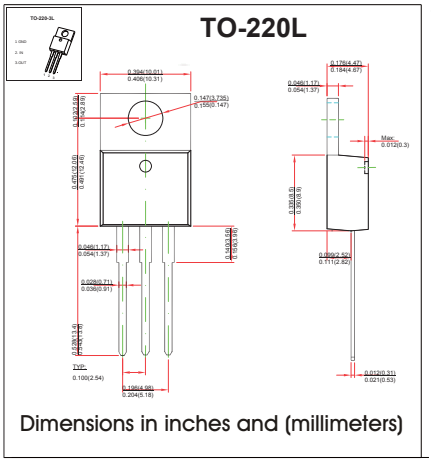
FEATURES

- Maximum output current IOM: 1.5 A
- Output voltageVO: -15V
- Continuous total dissipation

PD: 1.25 W (T a= 25 ℃)

MECHANICAL DATA

- Case: TO-220 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any



Dimensions in inches and (millimeters)

ABSOLUTE MAXIMUM RATINGS

(Operating temperature range applies unless otherw ise specified)

Parameter	Symbol	Value	Unit
Input Voltage	V_i	-35	V
Thermal Resistance from Junction to Air	$R_{\theta JA}$	83.3	℃/W
Operating Junction Temperature Range	T_{OPR}	0~+150	℃
Storage Temperature Range	T_{STG}	-65~+150	℃

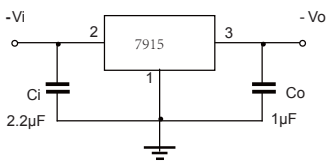
ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE

(Vi=-23V, Io=500mA, Ci=2.2μF,Co=1μF, unless otherwise specified)

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

* Pulse test.

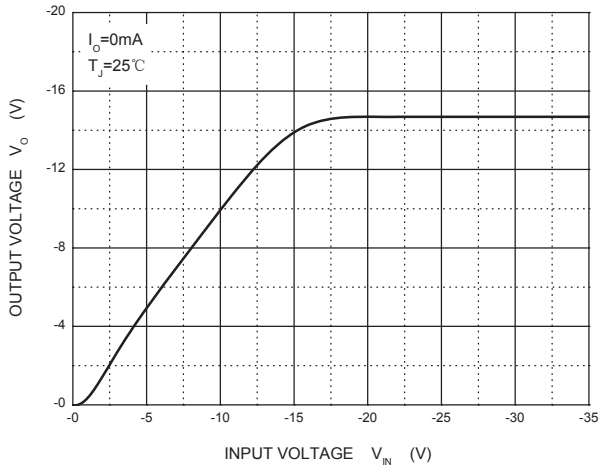
TYPICAL APPLICATION



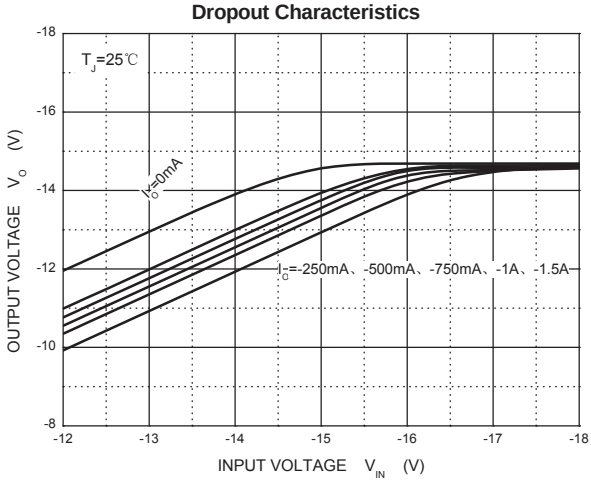
RATINGS AND CHARACTERISTIC CURVES

TYPICAL APPLICATION

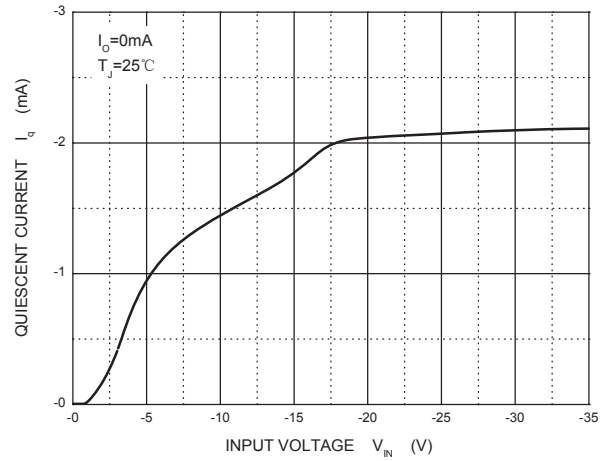
Output Characteristics



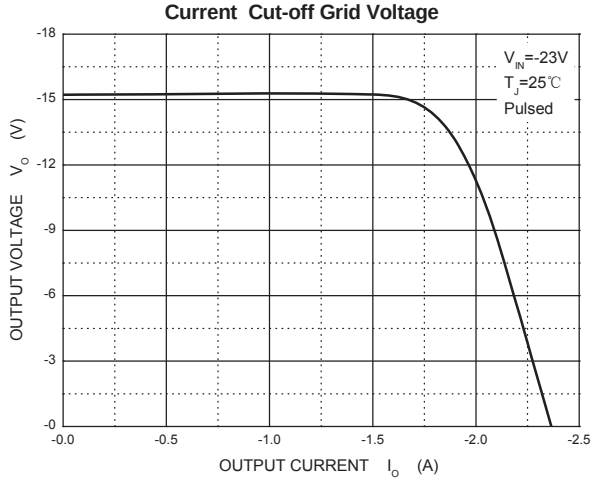
Dropout Characteristics



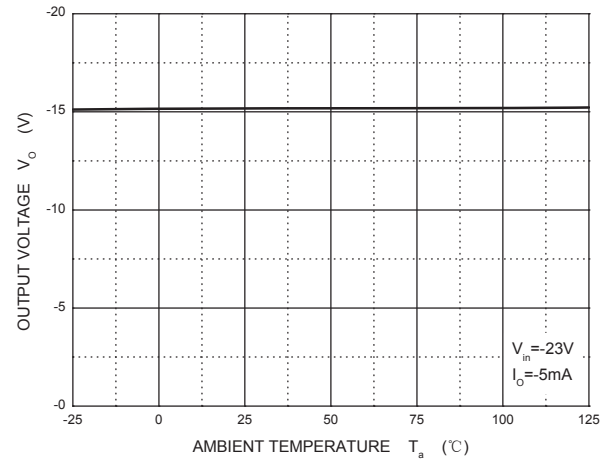
Quiescent Current vs Input Voltage



Current Cut-off Grid Voltage



Output Voltage vs Ambient Temperature



Power Derating Curve