

Three-terminal positive voltage regulator

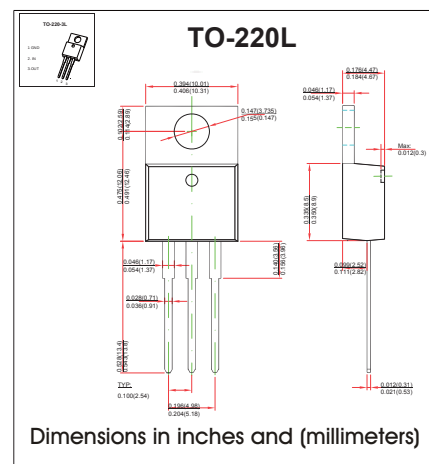
FEATURES

- Maximum output current IOM: 1.5 A
- Output voltage V_O : -8V
- Continuous total dissipation

$$P_D: 1.5 \text{ W (} T_a = 25^\circ \text{C)}$$

MECHANICAL DATA

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



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	$R_{\theta JA}$	83.3	$^\circ\text{C/W}$
Operating Junction Temperature Range	T_{OPR}	0~+150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65~+150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE ($V_i = -14\text{V}$, $I_o = 500\text{mA}$, $C_i = 2.2\mu\text{F}$, $C_o = 1\mu\text{F}$, unless otherwise specified)

Parameter	Symbol	Test conditions		Min	Typ	Max	Unit
Output Voltage	Vo		25°C	-7.68	-8	-8.32	V
		-10.5V≤Vi≤-23V,Io=5mA-1A	0-125°C	-7.6	-8	-8.4	V
Load Regulation	ΔVo	Io=5mA-1.5A	25°C		15	160	mV
		Io=250mA-750mA	25°C		5	80	mV
Line Regulation	ΔVo	-10.5V≤Vi≤-25V	25°C		12.5	160	mV
		-11V≤Vi≤-17V	25°C		4	80	mV
Quiescent Current	Iq		25°C		1.5	2	mA
Quiescent Current Change	ΔIq	-10.5V≤Vi≤-25V	0-125°C			1	mA
	ΔIq	5mA≤Io≤1A	0-125°C			0.5	mA
Output Noise Voltage	VN	10Hz≤f≤100KHz	25°C		200		μV/Vo
Output Voltage drift	ΔVo/ΔT	Io=5mA	0-125°C		-0.6		mV/°C
Ripple Rejection	RR	-11.5V≤Vi≤-21.5V,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

* Pulse test.

TYPICAL APPLICATION

