

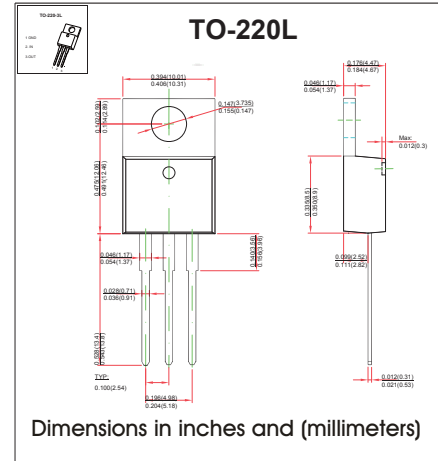
Three-terminal positive voltage regulator

FEATURES

- Maximum output current IOM: 1.5 A
- Output voltage VO: -12V
- 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

($V_i = -19\text{V}, I_o = 500\text{mA}, C_i = 2.2\mu\text{F}, C_o = 1\mu\text{F}$, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output Voltage	V_o	25°C	-11.52	-12	-12.48	V
		$-14.5\text{V} \leq V_i \leq -27\text{V}, I_o = 5\text{mA} - 1\text{A}$	0-125 $^\circ\text{C}$	-11.4	-12	-12.6
Load Regulation	ΔV_o	$I_o = 5\text{mA} - 1.5\text{A}$	25 $^\circ\text{C}$	15	200	mV
		$I_o = 250\text{mA} - 750\text{mA}$	25 $^\circ\text{C}$	5	75	mV
Line Regulation	ΔV_o	$-14.5\text{V} \leq V_i \leq -30\text{V}$	25 $^\circ\text{C}$	5	80	mV
		$-16\text{V} \leq V_i \leq -22\text{V}$	25 $^\circ\text{C}$	3	30	mV
Quiescent Current	I_q	25 $^\circ\text{C}$		2	3	mA
Quiescent Current Change	ΔI_q	$-14.5\text{V} \leq V_i \leq -30\text{V}$	0-125 $^\circ\text{C}$		0.5	mA
		$5\text{mA} \leq I_o \leq 1\text{A}$	0-125 $^\circ\text{C}$		0.5	mA
Output Noise Voltage	V_N	10Hz $\leq f \leq$ 100KHz	25 $^\circ\text{C}$	300		$\mu\text{V}/V_o$
Output Voltage Drift	$\Delta V_o / \Delta T$	$I_o = 5\text{mA}$	0-125 $^\circ\text{C}$	-0.8		mV/ $^\circ\text{C}$
Ripple Rejection	RR	$-15\text{V} \leq V_i \leq -25\text{V}, f = 120\text{Hz}$	0-125 $^\circ\text{C}$	54	60	dB
Dropout Voltage	V_d	$I_o = 1\text{A}$	25 $^\circ\text{C}$	1.1		V
Peak Current	I_{pk}	25 $^\circ\text{C}$		2.1		A

* Pulse test.

TYPICAL APPLICATION

