

## Three-terminal positive voltage regulator

### FEATURES

- Maximum output current I<sub>OM</sub>: 1.5 A

- Output voltage V<sub>O</sub>: -8V

- Continuous total dissipation

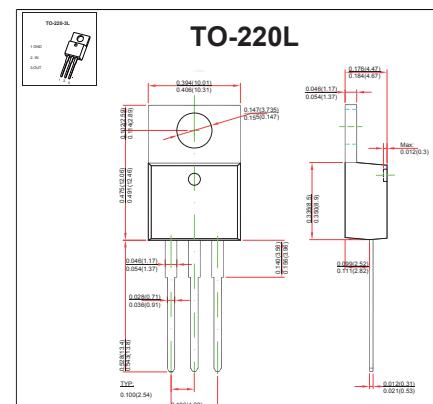
PD: 1.5 W ( T<sub>a</sub> = 25 °C )

### 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 <sub>i</sub>	-35	V
Thermal Resistance from Junction to Air	R <sub>θJA</sub>	83.3	°C/W
Operating Junction Temperature Range	T <sub>OPR</sub>	0~+150	°C
Storage Temperature Range	T <sub>STG</sub>	-65~+150	°C

### ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION

TEMPERATURE(V<sub>i</sub>=-14V,I<sub>O</sub>=500mA,C<sub>i</sub>=2.2μF,C<sub>O</sub>=1μF, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit	
Output Voltage	V <sub>O</sub>	25°C	-7.68	-8	-8.32	V	
		-10.5V≤V <sub>i</sub> ≤-23V,I <sub>O</sub> =5mA-1A	0-125°C	-7.6	-8	-8.4	V
Load Regulation	ΔV <sub>O</sub>	I <sub>O</sub> =5mA-1.5A	25°C		15	160	mV
		I <sub>O</sub> =250mA-750mA	25°C		5	80	mV
Line Regulation	ΔV <sub>O</sub>	-10.5V≤V <sub>i</sub> ≤-25V	25°C		12.5	160	mV
		-11V≤V <sub>i</sub> ≤-17V	25°C		4	80	mV
Quiescent Current	I <sub>Q</sub>		25°C		1.5	2	mA
Quiescent Current Change	ΔI <sub>Q</sub>	-10.5V≤V <sub>i</sub> ≤-25V	0-125°C		1	mA	
	ΔI <sub>Q</sub>	5mA≤I <sub>O</sub> ≤1A	0-125°C		0.5	mA	
Output Noise Voltage	V <sub>N</sub>	10Hz≤f≤100KHz	25°C		200		μV/V <sub>O</sub>
Output Voltage drift	△V <sub>O</sub> /△T	I <sub>O</sub> =5mA	0-125°C		-0.6		mV/°C
Ripple Rejection	RR	-11.5V≤V <sub>i</sub> ≤-21.5V,f=120Hz	0-125°C	54	60		dB
Dropout Voltage	V <sub>d</sub>	I <sub>O</sub> =1A	25°C		1.1		V
Peak Current	I <sub>pk</sub>		25°C		2.1		A

\* Pulse test.

### TYPICAL APPLICATION

