

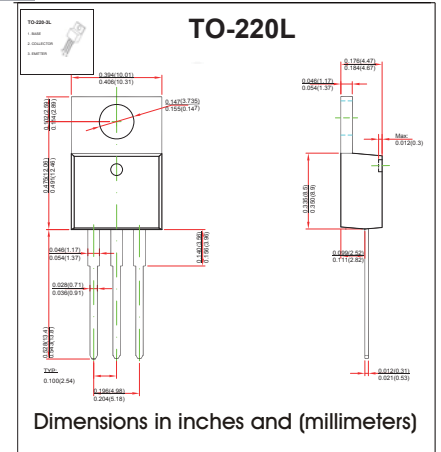
## Three-terminal positive voltage regulator

### FEATURES

- Maximum Output current I<sub>OM</sub>: 1.5 A
- Output voltage V<sub>O</sub>: 12 V
- Continuous total dissipation  
PD: 1.5 W (T<sub>a</sub> = 25 °C)

### MECHANICAL DATA

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



### MAXIMUM RATINGS AND CHARACTERISTICS

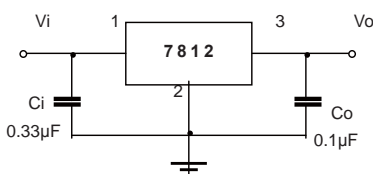
@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Value	Unit
Input Voltage	V <sub>i</sub>	35	V
Thermal Resistance from Junction to Ambient	R <sub>θJA</sub>	83.3	°C/W
Thermal Resistance from Junction to Case	R <sub>θJC</sub>	8.3	°C/W
Operating Junction Temperature Range	T <sub>OPR</sub>	0~+150	°C
Storage Temperature Range	T <sub>STG</sub>	-55~+150	°C

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE  
(V<sub>i</sub>=19V, I<sub>o</sub>=500mA, C<sub>i</sub>=0.33 F, C<sub>o</sub>=0.1 F, unless otherwise specified )

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output voltage	V <sub>o</sub>	25°C	11.5	12.0	12.5	V
		I <sub>o</sub> = 5.0mA-1.0A, P≤15W 14.5V ≤ V <sub>i</sub> ≤ 27V	0-125°C	11.4	12	12.6
Load Regulation	ΔV <sub>o</sub>	14.5V ≤ V <sub>i</sub> ≤ 30V	25°C	10	240	mV
		16V ≤ V <sub>i</sub> ≤ 22V	25°C	3	120	mV
Line regulation	ΔV <sub>o</sub>	I <sub>o</sub> =5mA - 1.5A	25°C	12	240	mV
		I <sub>o</sub> =250mA - 750mA	25°C	4	120	mV
Quiescent Current	I <sub>q</sub>	25°C		4.3	8	mA
Quiescent Current Change	ΔI <sub>q</sub>	5.0mA ≤ I <sub>o</sub> ≤ 1.0A	0-125°C		0.5	mA
		14.5V ≤ V <sub>i</sub> ≤ 30V	0-125°C		1.0	mA
Output voltage drift	ΔV <sub>o</sub> /ΔT	I <sub>o</sub> =5mA	0-125°C	-1		mV/°C
Output Noise Voltage	V <sub>N</sub>	f = 10Hz to 100KHz	25°C		75	μV
Ripple Rejection	RR	f = 120Hz, 15V ≤ V <sub>i</sub> ≤ 25V	0-125°C	55	71	dB
Dropout Voltage	V <sub>d</sub>	I <sub>o</sub> =1.0A	25°C		2	V
Output resistance	R <sub>o</sub>	f = 1KHz	25°C		18	mΩ
Short Circuit Current	I <sub>sc</sub>	25°C			350	mA
Peak Current	I <sub>pk</sub>	25°C			2.2	A

### TYPICAL APPLICATION



# RATINGS AND CHARACTERISTIC CURVES

## TYPICAL APPLICATION

