

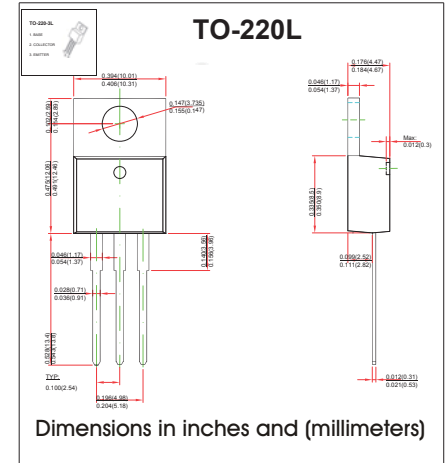
Three-terminal positive voltage regulator

**FEATURES**

- Maximum output current IOM:1.5 A
- Output voltage VO: 6V
- Continuous total dissipation PD: 1.5W

**MECHANICAL DATA**

- Case: TO-220 Small Outline 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	$V_i$	35	V
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	66.7	°C/W
Operating Junction Temperature Range	$T_{OPR}$	-25~+125	°C
Storage Temperature Range	$T_{STG}$	-65~+150	°C

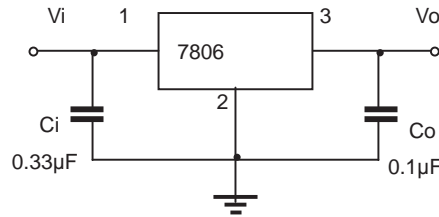
ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE  
( $V_i=11V, I_o=500mA, C_i=0.33\mu F, C_o=0.1\mu F$ , unless otherwise specified )

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Output voltage	$V_o$	25°C	5.75	6	6.25	V
		$8V \leq V_i \leq 21V, I_o=5mA-1A$	-25-125°C	5.7	6	6.3
Load Regulation	$\Delta V_o$	$I_o=5mA-1.5A$	25°C	14	120	mV
		$I_o=250mA-750mA$	25°C	4	60	mV
Line regulation	$\Delta V_o$	$8V \leq V_i \leq 25V$	25°C	5	120	mV
		$9V \leq V_i \leq 13V$	25°C	1.5	60	mV
Quiescent Current	$I_q$	25°C		4.3	8	mA
Quiescent Current Change	$\Delta I_q$	$8V \leq V_i \leq 25V$	-25-125°C		1.3	mA
		$5mA \leq I_o \leq 1A$	-25-125°C		0.5	mA
Output voltage drift	$\Delta V_o/\Delta T$	$I_o=5mA$	0-125°C	-0.8		mV/°C
Output Noise Voltage	$V_N$	$10Hz \leq f \leq 100KHz$	25°C	45		$\mu V/V_o$
Ripple Rejection	RR	$9V \leq V_i \leq 19V, f=120Hz$	-25-125°C	59	75	dB
Dropout Voltage	$V_d$	$I_o=1A$	25°C	2		V
Output resistance	$R_o$	$f=1KHz$	25°C	10		mΩ
Short Circuit Current	$I_{sc}$	25°C		550		mA
Peak Current	$I_{pk}$	25°C		2.2		A

\* Pulse test.

# RATINGS AND CHARACTERISTIC CURVES

## TYPICAL APPLICATION



Note: Bypass capacitors are recommended for optimum stability and transient response and should be located as close as possible to the regulators.

