

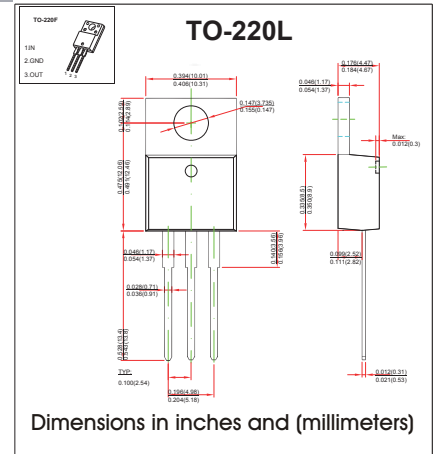
Three-terminal positive voltage regulator

FEATURES

- Maximum output current IOM:1.5 A
- Output voltage VO: 15 V
- Continuous total dissipation PD: 1.5W (T a = 25 ° C)

MECHANICAL DAT

- 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_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

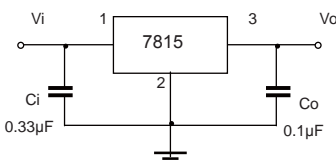
ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE

($V_i=23V, I_o=500mA, C_i=0.33 F, C_o=0.1 F$, unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Output voltage	V_o	25°C	14.4	15	15.6	V
		17.5V ≤ V_i ≤ 30V, $I_o=5mA-1A$	-25~125°C	14.25	15	15.75
Load Regulation	ΔV_o	$I_o=5mA-1.5A$	25°C	12	300	mV
		$I_o=250mA-750mA$	25°C	4	150	mV
Line regulation	ΔV_o	17.5V ≤ V_i ≤ 30V	25°C	12	300	mV
		20V ≤ V_i ≤ 26V	25°C	3	150	mV
Quiescent Current	I_q	25°C	4.3	8	mA	
Quiescent Current Change	ΔI_q	17.5V ≤ V_i ≤ 30V	-25~125°C		1	mA
		5mA ≤ I_o ≤ 1A			0.5	mA
Output voltage drift	$\Delta V_o/\Delta T$	$I_o=5mA$	-25~125°C	-1		mV/°C
Output Noise Voltage	V_N	10Hz ≤ f ≤ 100KHz	25°C	90		μV/ V_o
Ripple Rejection	RR	18.5V ≤ V_i ≤ 28.5V, f=120Hz	-25~125°C	54	70	dB
Dropout Voltage	V_d	$I_o=1A$	25°C	2		V
Output resistance	R_o	f=1KHz	25°C	19		mΩ
Short Circuit Current	I_{sc}	25°C		230		mA
Peak Current	I_{pk}	25°C		2.1		A

* Pulse test.

TYPICAL APPLICATION



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



RATINGS AND CHARACTERISTIC CURVES

TYPICAL APPLICATION

