

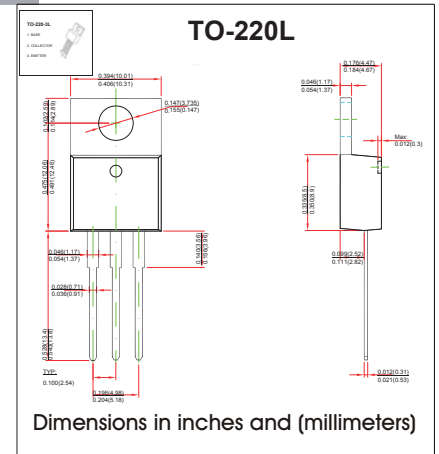
Three-terminal positive voltage regulator

FEATURES

- Maximum Output current I_{OM}: 1.5 A
- Output voltage V_O: 8 V
- Continuous total dissipation PD: 1.5 W
15W (Ta= 25 °C)

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)

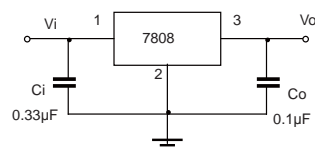
Parameter	Symbol	Value	Unit
Input Voltage	V _i	35	V
Thermal Resistance from Junction to Ambient	R _{θJA}	83.3	°C/W
Thermal Resistance from Junction to Case	R _{θJC}	8.3	°C/W
Operating Junction Temperature Range	T _{OPR}	0~+150	°C
Storage Temperature Range	T _{STG}	-55~+150	°C

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE

(V_i=14V, I_o=500mA, C_i=0.33μF, C_o=0.1μF, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output Voltage	V _o	25°C	7.7	8	8.3	V
		10.5V≤V _i ≤23V, I _o =5mA-1A, P≤15W	0-125°C	7.6	8	8.4
Load Regulation	ΔV _o	I _o =5mA-1.5A	25°C	12	160	mV
		I _o =250mA-750mA	25°C	4	80	mV
Line Regulation	ΔV _o	10.5V≤V _i ≤25V	25°C	6	160	mV
		11V≤V _i ≤17V	25°C	2	80	mV
Quiescent Current	I _q	25°C		4.3	8	mA
Quiescent Current Change	ΔI _q	10.5V≤V _i ≤25V	0-125°C		1	mA
		5mA≤I _o ≤1A	0-125°C		0.5	mA
Output Voltage Drift	ΔV _o /ΔT	I _o =5mA	0-125°C	-0.8		mV/°C
Output Noise Voltage	V _N	10Hz≤f≤100KHz	25°C	52		μV
Ripple Rejection	RR	11.5V≤V _i ≤21.5V, f=120Hz	0-125°C	55	72	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		450		mA
Peak Current	I _{pk}	25°C		2.2		A

TYPICAL APPLICATION



RATINGS AND CHARACTERISTIC CURVES

TYPICAL APPLICATION

