

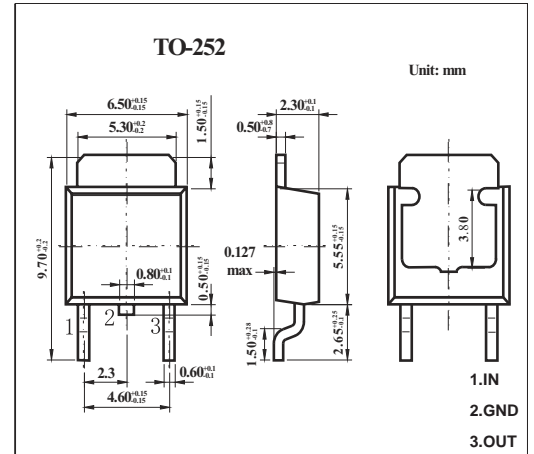
Three-terminal positive voltage regulator

FEATURES

- Maximum output current IOM:1.5 A
- Output voltage VO: 8V
- Continuous total dissipation PD: 1.5W

MECHANICAL DATA

- Case: TO-252 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}	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
 (Vi=14V, Io=500mA, Ci=0.33μF, Co=0.1μF, unless otherwise specified)

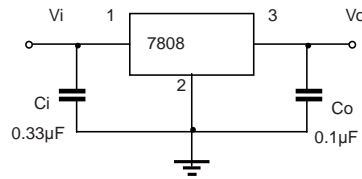
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output Voltage	Vo	25°C	7.7	8	8.3	V
		10.5V≤Vi≤23V, Io=5mA-1A	-25-125°C	7.6	8	8.4
Load Regulation	ΔVo	Io=5mA-1.5A	25°C	12	160	mV
		Io=250mA-750mA	25°C	4	80	mV
Line Regulation	ΔVo	10.5V≤Vi≤25V	25°C	6	160	mV
		11V≤Vi≤17V	25°C	2	80	mV
Quiescent Current	Iq	25°C		4.3	8	mA
Quiescent Current Change	ΔIq	10.5V≤Vi≤25V	-25-125°C		1	mA
		5mA≤Io≤1A	-25-125°C		0.5	mA
Output Voltage Drift	ΔVo/ΔT	Io=5mA	-25-125°C	-0.8		mV/°C
Output Noise Voltage	V _N	10Hz≤f≤100KHz	25°C	52		μV/Vo
Ripple Rejection	RR	11.5V≤Vi≤21.5V, f=120Hz	-25-125°C	55	72	dB
Dropout Voltage	Vd	Io=1A	25°C	2		V
Output Resistance	R _O	f=1KHz	25°C	10		mΩ
Short Circuit Current	Isc	25°C		450		mA
Peak Current	Ipk	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.

