

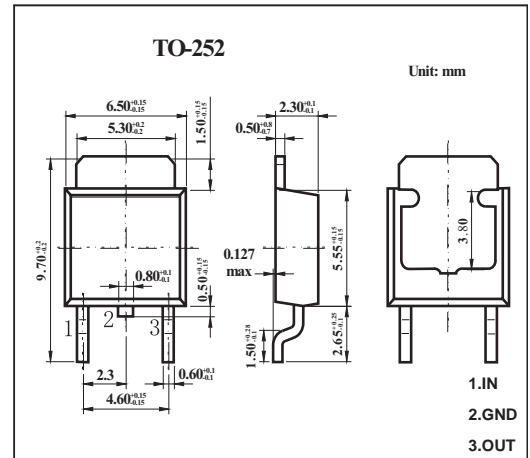
Three-terminal positive voltage regulator

FEATURES

- Maximum output current I<sub>OM</sub>: 1.5 A
- Output voltage V<sub>O</sub>: 9 V
- Continuous total dissipation  
P<sub>D</sub>:1.25 W (T<sub>A</sub> = 25 °C )

MECHANICAL DATA

- Case: TO-252 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>	80	°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>=16V, I<sub>o</sub>=500mA, C<sub>i</sub>=0.33μF, C<sub>o</sub>=0.1μF, unless otherwise specified)

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Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Output voltage	V <sub>o</sub>	25°C	8.65	9	9.35	V
		11.5V ≤ V <sub>i</sub> ≤ 24V, I <sub>o</sub> = 5mA-1A, P ≤ 15W 0-125°C	8.55	9	9.45	V
Load Regulation	ΔV <sub>o</sub>	I <sub>o</sub> = 5mA-1.5A 25°C		12	180	mV
		I <sub>o</sub> = 250mA-750mA 25°C		4	90	mV
Line regulation	ΔV <sub>o</sub>	11.5V ≤ V <sub>i</sub> ≤ 27V 25°C		7	180	mV
		13V ≤ V <sub>i</sub> ≤ 19V 25°C		2	90	mV
Quiescent Current	I <sub>q</sub>	25°C		4.3	8	mA
Quiescent Current Change	ΔI <sub>q</sub>	11.5V ≤ V <sub>i</sub> ≤ 27V 0-125°C			1	mA
		5mA ≤ I <sub>o</sub> ≤ 1A 0-125°C			0.5	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>	10Hz ≤ f ≤ 100KHz 25°C		60		μV
Ripple Rejection	RR	12V ≤ V <sub>i</sub> ≤ 22V, f = 120Hz 0-125°C	55	70		dB
Dropout Voltage	V <sub>d</sub>	I <sub>o</sub> = 1A 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		400		mA
Peak Current	I <sub>pk</sub>	25°C		2.2		A

TYPICAL APPLICATION

