

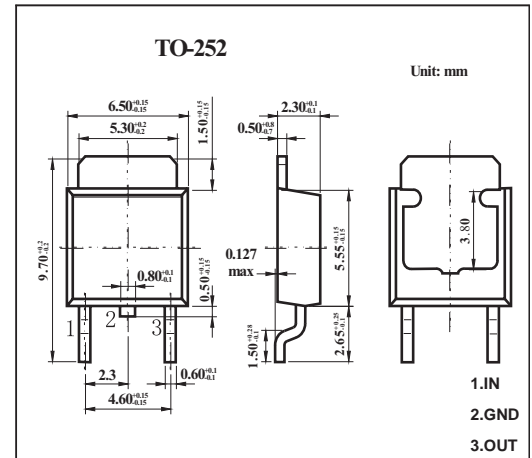
Three-terminal positive voltage regulator

FEATURES

- Maximum output current I_{OM}: 1.5 A
- Output voltage V_O: 9 V
- Continuous total dissipation
P_D: 1.25 W (T_a = 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 _i	35	V
Thermal Resistance from Junction to Ambient	R _{θJA}	80	°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=16V, I_o=500mA, C_i=0.33μF, C_o=0.1μF, unless otherwise specified)

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Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Output voltage	V _o	25°C	8.65	9	9.35	V
		11.5V ≤ V _i ≤ 24V, I _o = 5mA-1A, P ≤ 15W	0-125°C	8.55	9	9.45
Load Regulation	ΔV _o	I _o = 5mA-1.5A	25°C	12	180	mV
		I _o = 250mA-750mA	25°C	4	90	mV
Line regulation	ΔV _o	11.5V ≤ V _i ≤ 27V	25°C	7	180	mV
		13V ≤ V _i ≤ 19V	25°C	2	90	mV
Quiescent Current	I _q	25°C		4.3	8	mA
Quiescent Current Change	ΔI _q	11.5V ≤ V _i ≤ 27V	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	-1		mV/°C
Output Noise Voltage	V _N	10Hz ≤ f ≤ 100KHz	25°C	60		μV
Ripple Rejection	RR	12V ≤ V _i ≤ 22V, f = 120Hz	0-125°C	55	70	dB
Dropout Voltage	V _d	I _o = 1A	25°C	2		V
Output resistance	R _o	f = 1KHz	25°C	18		mΩ
Short Circuit Current	I _{sc}	25°C		400		mA
Peak Current	I _{pk}	25°C		2.2		A

TYPICAL APPLICATION

