

Three-terminal positive voltage regulator

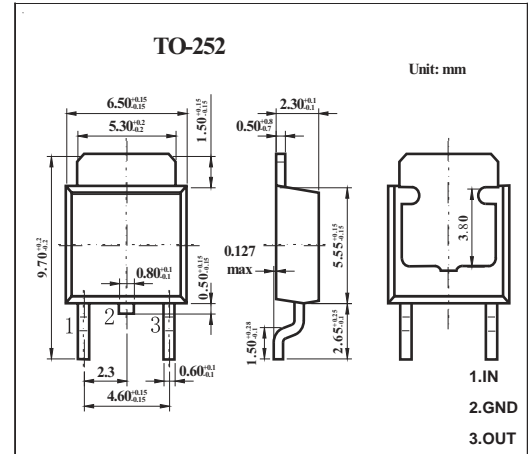
**FEATURES**

- Maximum output current IOM: 1.5 A
- Output voltage $V_O$ : -8V
- Continuous total dissipation

$$P_D: 1.25 W ( T_a = 25 ^\circ C )$$

**MECHANICAL DATA**

- Case: TO-252 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any



**ABSOLUTE MAXIMUM RATINGS**

(Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Unit
Input Voltage	$V_i$	-35	V
Thermal Resistance from Junction to Air	$R_{\theta JA}$	100	$^\circ C/W$
Operating Junction Temperature Range	$T_{OPR}$	0~+150	$^\circ C$
Storage Temperature Range	$T_{STG}$	-65~+150	$^\circ C$

**ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE ( $V_i = -14V, I_o = 500mA, C_i = 2.2\mu F, C_o = 1\mu F$ , unless otherwise specified)**

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output Voltage	$V_o$	$25^\circ C$	-7.68	-8	-8.32	V
		$-10.5V \leq V_i \leq -23V, I_o = 5mA - 1A$ $0 - 125^\circ C$	-7.6	-8	-8.4	V
Load Regulation	$\Delta V_o$	$I_o = 5mA - 1.5A$ $25^\circ C$		15	160	mV
		$I_o = 250mA - 750mA$ $25^\circ C$		5	80	mV
Line Regulation	$\Delta V_o$	$-10.5V \leq V_i \leq -25V$ $25^\circ C$		12.5	160	mV
		$-11V \leq V_i \leq -17V$ $25^\circ C$		4	80	mV
Quiescent Current	$I_q$	$25^\circ C$		1.5	2	mA
Quiescent Current Change	$\Delta I_q$	$-10.5V \leq V_i \leq -25V$ $0 - 125^\circ C$			1	mA
	$\Delta I_q$	$5mA \leq I_o \leq 1A$ $0 - 125^\circ C$			0.5	mA
Output Noise Voltage	$V_N$	$10Hz \leq f \leq 100KHz$ $25^\circ C$		200		$\mu V/V_o$
Output Voltage drift	$\Delta V_o / \Delta T$	$I_o = 5mA$ $0 - 125^\circ C$		-0.6		$mV/^\circ C$
Ripple Rejection	RR	$-11.5V \leq V_i \leq -21.5V, f = 120Hz$ $0 - 125^\circ C$	54	60		dB
Dropout Voltage	$V_d$	$I_o = 1A$ $25^\circ C$		1.1		V
Peak Current	$I_{pk}$	$25^\circ C$		2.1		A

\* Pulse test.

**TYPICAL APPLICATION**

