

Three-terminal positive voltage regulator

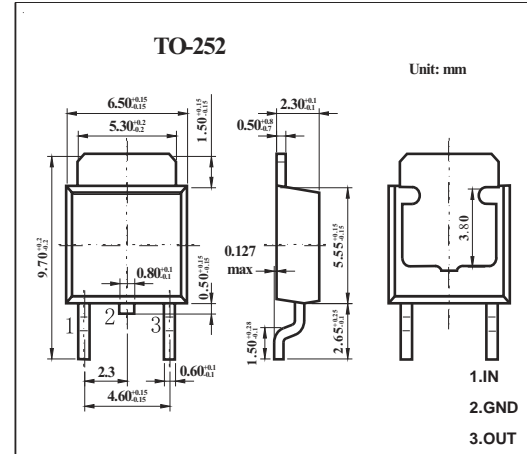
FEATURES

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

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

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	$^\circ\text{C}/\text{W}$
Operating Junction Temperature Range	T_{OPR}	0~+150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65~+150	$^\circ\text{C}$

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

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

* Pulse test.

TYPICAL APPLICATION

