

Three-terminal positive voltage regulator

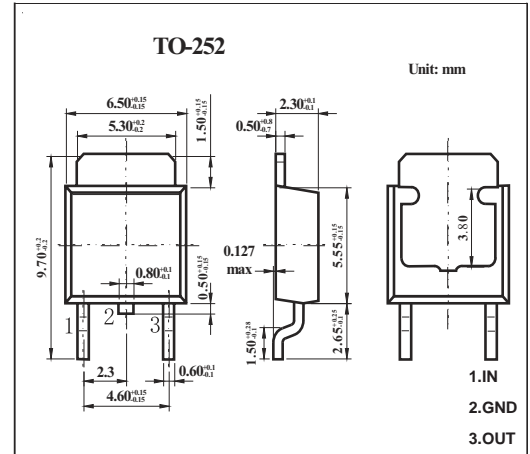
FEATURES

- Maximum output current IOM: 1.5 A
- Output voltage VO: -5V
- Continuous total dissipation

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

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	$^\circ\text{C/W}$
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 ($V_i = -10\text{V}, I_o = 500\text{mA}, C_i = 2.2\mu\text{F}, C_o = 1\mu\text{F}$, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit	
Output Voltage	V_o	25°C	-4.8	-5	-5.2	V	
		$-7\text{V} \leq V_i \leq -20\text{V}, I_o = 5\text{mA} - 1\text{A}$	0-125 $^\circ\text{C}$	-4.75	-5	-5.25	V
Load Regulation	ΔV_o	$I_o = 5\text{mA} - 1.5\text{A}$	25°C		15	100	mV
		$I_o = 250\text{mA} - 750\text{mA}$	25°C		5	50	mV
Line Regulation	ΔV_o	$-7\text{V} \leq V_i \leq -25\text{V}$	25°C		12.5	50	mV
		$-8\text{V} \leq V_i \leq -12\text{V}$	25°C		4	15	mV
Quiescent Current	I_q	25°C		1.5	2	mA	
Quiescent Current Change	ΔI_q	$-7\text{V} \leq V_i \leq -25\text{V}$	0-125 $^\circ\text{C}$			0.5	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	125		$\mu\text{V}/V_o$	
Output Voltage Drift	$\Delta V_o / \Delta T$	$I_o = 5\text{mA}$	0-125 $^\circ\text{C}$	-0.4		$\text{mV}/^\circ\text{C}$	
Ripple Rejection	RR	$-8\text{V} \leq V_i \leq -18\text{V}, f = 120\text{Hz}$	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

