

TO-252 Three-terminal positive voltage regulator

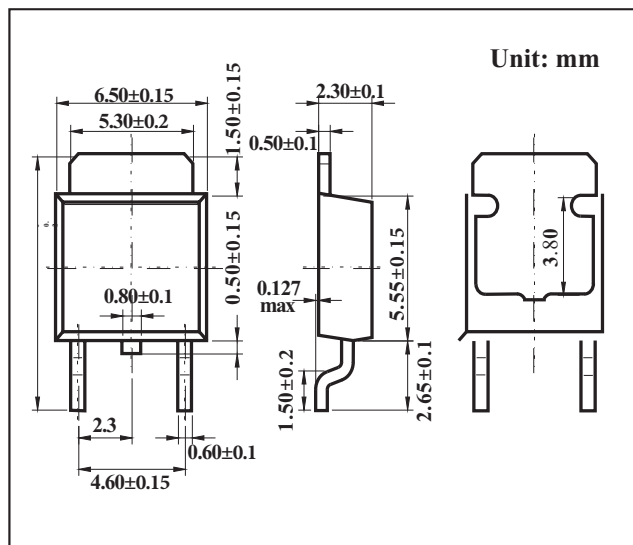
FEATURES

- Maximum output current IOM: 1.5 A
- Output voltage VO: -12V
- 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	-30	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 ($V_i = -19\text{V}$, $I_o = 500\text{mA}$, $C_i = 2.2\mu\text{F}$, $C_o = 1\mu\text{F}$, unless otherwise specified)

Parameter	Symbol	Test conditions		Min	Typ	Max	Unit
Output Voltage	V_o		25 $^\circ\text{C}$	-11.52	-12	-12.48	V
		-14.5V ≤ V_i ≤ -27V, $I_o = 5\text{mA} - 1\text{A}$	0-125 $^\circ\text{C}$	-11.4	-12	-12.6	V
Load Regulation	ΔV_o	$I_o = 5\text{mA} - 1.5\text{A}$	25 $^\circ\text{C}$		15	200	mV
		$I_o = 250\text{mA} - 750\text{mA}$	25 $^\circ\text{C}$		5	75	mV
Line Regulation	ΔV_o	-14.5V ≤ V_i ≤ -30V	25 $^\circ\text{C}$		5	80	mV
		-16V ≤ V_i ≤ -22V	25 $^\circ\text{C}$		3	30	mV
Quiescent Current	I_q		25 $^\circ\text{C}$		2	3	mA
Quiescent Current Change	ΔI_q	-14.5V ≤ V_i ≤ -30V	0-125 $^\circ\text{C}$			0.5	mA
		5mA ≤ I_o ≤ 1A	0-125 $^\circ\text{C}$			0.5	mA
Output Noise Voltage	V_N	10Hz ≤ f ≤ 100KHz	25 $^\circ\text{C}$		300		$\mu\text{V}/V_o$
Output Voltage Drift	$\Delta V_o / \Delta T$	$I_o = 5\text{mA}$	0-125 $^\circ\text{C}$		-0.8		mV/ $^\circ\text{C}$
Ripple Rejection	RR	-15V ≤ V_i ≤ -25V, f = 120Hz	0-125 $^\circ\text{C}$	54	60		dB
Dropout Voltage	V_d	$I_o = 1\text{A}$	25 $^\circ\text{C}$		1.1		V
Peak Current	I_{pk}		25 $^\circ\text{C}$		2.1		A

* Pulse test.

TYPICAL APPLICATION

