

Three-terminal positive voltage regulator

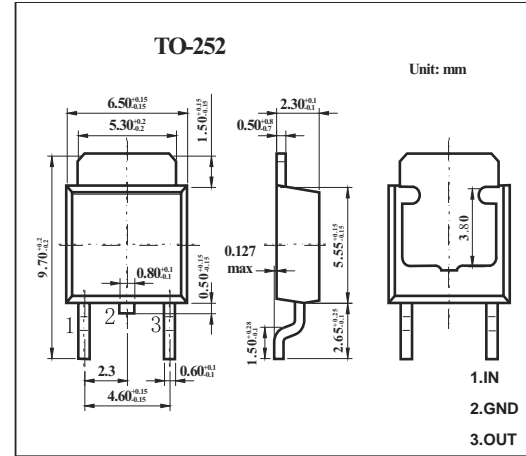
**FEATURES**

- Maximum output current IOM: 1.5 A
- Output voltage $V_O$ : -15V
- Continuous total dissipation

$P_D$ : 1.25 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 Junction-Air	$R_{\theta JA}$	100	$^\circ\text{C}/\text{W}$
Thermal Resistance Junction-Case	$R_{\theta JC}$	10	$^\circ\text{C}/\text{W}$
Operating Junction Temperature Range	$T_{OPR}$	0~+150	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55~+150	$^\circ\text{C}$

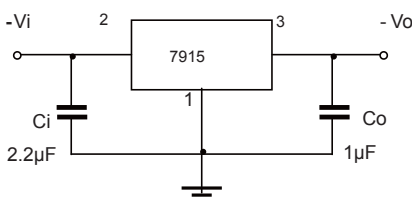
**ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE**

( $V_i = -23\text{V}$ ,  $I_o = 500\text{mA}$ ,  $C_i = 2.2\mu\text{F}$ ,  $C_o = 1\mu\text{F}$ , unless otherwise specified )

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output voltage	$V_o$	$25\text{ }^\circ\text{C}$	-14.4	-15	-15.6	V
		$-17.5\text{V} \leq V_i \leq -30\text{V}$ , $I_o = 5\text{mA} - 1\text{A}$	0-125 $^\circ\text{C}$	-14.25	-15	-15.75
Load regulation	$\Delta V_o$	$I_o = 5\text{mA} - 1.5\text{A}$	$25\text{ }^\circ\text{C}$	15	200	mV
		$I_o = 250\text{mA} - 750\text{mA}$	$25\text{ }^\circ\text{C}$	5	75	mV
Line regulation	$\Delta V_o$	$-17.5\text{V} \leq V_i \leq -30\text{V}$	$25\text{ }^\circ\text{C}$	5	100	mV
		$-20\text{V} \leq V_i \leq -26\text{V}$	$25\text{ }^\circ\text{C}$	3	50	mV
Quiescent current	$I_q$	$25\text{ }^\circ\text{C}$		2	3	mA
Quiescent current change	$\Delta I_q$	$-17.5\text{V} \leq V_i \leq -30\text{V}$	0-125 $^\circ\text{C}$		0.5	mA
		$5\text{mA} \leq I_o \leq 1\text{A}$	0-125 $^\circ\text{C}$		0.5	mA
Output noise voltage	$V_N$	10Hz $\leq f \leq 100\text{KHz}$	$25\text{ }^\circ\text{C}$	375		$\mu\text{V}/V_o$
Output voltage drift	$\Delta V_o / \Delta T$	$I_o = 5\text{mA}$	0-125 $^\circ\text{C}$	-1		$\text{mV}/^\circ\text{C}$
Ripple rejection	RR	$-18.5\text{V} \leq V_i \leq -28.5\text{V}$ , $f = 120\text{Hz}$	0-125 $^\circ\text{C}$	54	60	dB
Dropout voltage	$V_d$	$I_o = 1\text{A}$	$25\text{ }^\circ\text{C}$	1.1		V
Peak current	$I_{pk}$	$25\text{ }^\circ\text{C}$		2.1		A
Short circuit current	$I_{sc}$	$V_i = -35\text{V}$	$25\text{ }^\circ\text{C}$	300		mA

\* Pulse test.

**TYPICAL APPLICATION**



# RATINGS AND CHARACTERISTIC CURVES

## TYPICAL APPLICATION

