

AMS1117-3.3

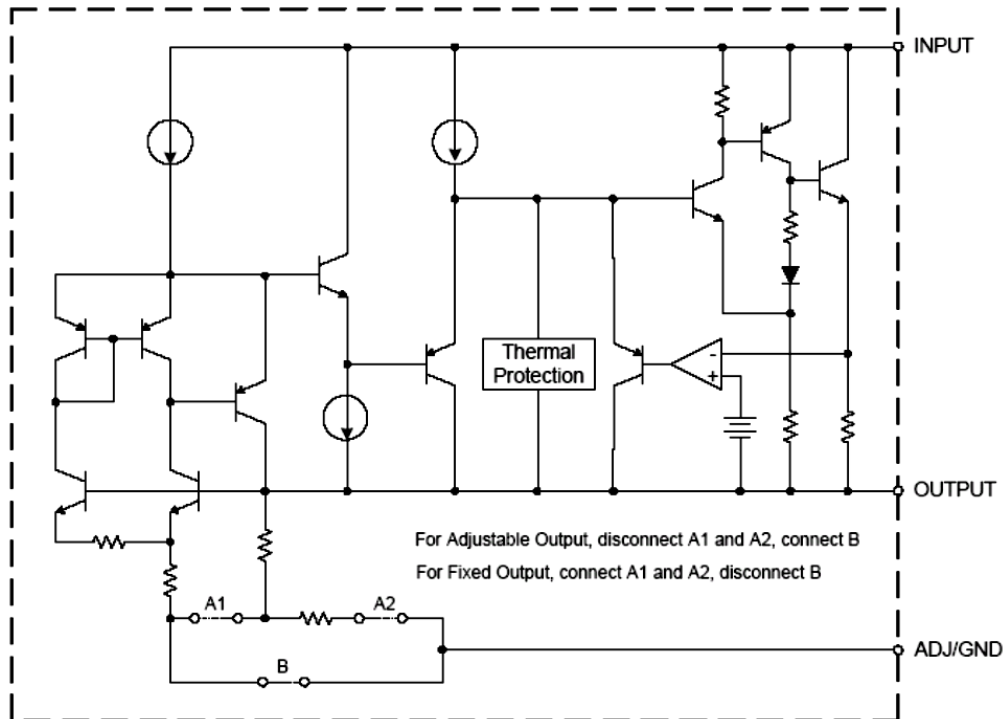
Electrical Characteristics (Operating Conditions: $V_{IN} \leq 10V$, $T_J = 25^\circ C$ unless otherwise specified)

Parameter	Conditions	Min	Typ	Max	unit
Output Voltage	$I_{OUT} = 10mA$, $V_{IN} = 5.0V$	3.267	3.3	3.333	V
	$10mA \leq I_{OUT} \leq 1A$, $4.75V \leq V_{IN} \leq 10V$	3.235	3.3	3.365	
Line Regulation	$I_{OUT} = 10mA$, $1.5V \leq V_{IN} - V_{OUT} \leq 10V$		1	6	mV
Load Regulation	$V_{IN} - V_{OUT} = 2V$, $10mA \leq I_{OUT} \leq 1A$		1	10	mV
Dropout Voltage	$\Delta V_{REF} = 1\%$, $I_{OUT} = 0.1A$		1.00	1.10	V
	$\Delta V_{REF} = 1\%$, $I_{OUT} = 0.5A$		1.08	1.18	
	$\Delta V_{REF} = 1\%$, $I_{OUT} = 1.0A$		1.15	1.25	
Current Limit	$V_{IN} - V_{OUT} = 2V$	1.25	1.35		A
Adjust Pin Current			60	120	μA
Adjust Pin Current Change	$1.4V \leq V_{IN} - V_{OUT} \leq 10V$, $10mA \leq I_{OUT} \leq 1A$		0.2	5	μA
Quiescent Current	$V_{IN} = V_{OUT} + 1.25V$		5	10	mA
Ripple Rejection	$f = 120Hz$, $C_{OUT} = 22\mu F$ Tantalum, $V_{IN} - V_{OUT} = 3V$, $I_{OUT} = 1A$	60	75		dB
Temperature Stability			0.5		%
Long-Term Stability	$T_A = 125^\circ C$, 1000hrs		0.3		%
RMS Output Noise(% of V_{OUT})	$T_A = 25^\circ C$, $10Hz \leq f \leq 10KHz$		0.003		%
Thermal Resistance, Junction to Case *			25		$^\circ C/W$
Thermal Shutdown	Junction Temperature		150		$^\circ C$
Thermal Shutdown Hysteresis			25		$^\circ C$

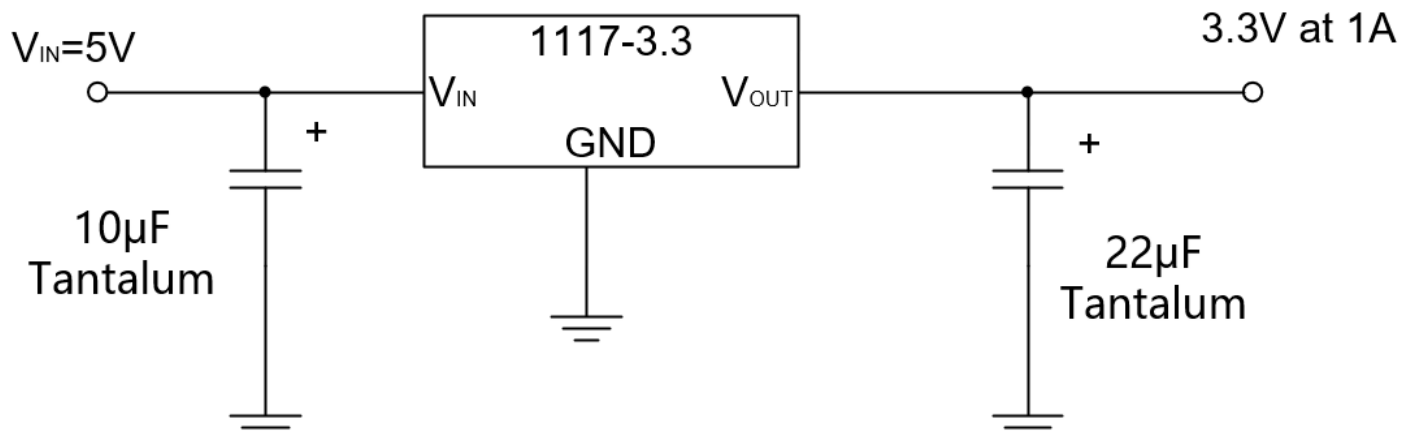
* With package soldering to copper area over backside ground plane or internal power plane RQJA can vary from $46^\circ C/W$ to $>90^\circ C/W$ depending on mounting technique and the size of the copper area.

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Functional Block Diagram



Typical Applications



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Typical Characteristics

