WS317L

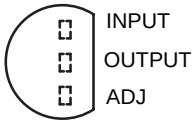
THREE-TERMINAL POSITIVE VOLTAGE REGULATOR IC

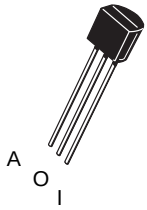
ABSOLUTE MAXIMUM RATINGS

Power dissipation	**Internally limited**
Input-Output Voltage Differential	**38V**
Operating Junction Temperature Range	**-20℃ to +85℃**
Storage Temperature	**–55℃ to +150℃**
Lead Temperature(Soldering, 4seconds)	**260℃**

Output is Short Circuit Protected
ESD rating to be determined

TO-92 WS317LZ





ELECTRICAL CHARACTERRISTISTICS

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
Line Regulation	$3V \leqq (V_{IN}-V_{OUT}) \leqq 40V, I_L \leqq 20mA$		0.02	0.07	%/V
Load Regulation	$5mA \leqq I_{OUT} \leqq 100mA$		0.3	1.5	%
Reference Voltage	$5mA \leqq I_{OUT} \leqq 100mA$ $P \leqq 625mW$ $3V \leqq (V_{IN}-V_{OUT}) \leqq 40V$	1.20	1.25	1.30	V
Adjustment Pin Current			50	100	μA
Adjustment Pin Current Change	$5mA \leqq IL \leqq 100mA$, $3V \leqq (VIN-VOUT) \leqq 40V$ $P \leqq 625mW$		0.2	5	μA
Minimum Load Current	$(V_{IN}-V_{OUT}) \leqq 40V$ $3V \leqq (V_{IN}-V_{OUT}) \leqq 15V$		3.5 1.5	5 2.5	mA
Current Limit	$3V \leqq (V_{IN}-V_{OUT}) \leqq 13V$ $(V_{IN}-V_{OUT})=40V$	90 25	200 50	300 120	mA
RMS Output Noise % of V_{OUT}	$T_J=25, 10_{HZ} \leqq F \leqq 10KH_Z$		0.03		%
Ripple Rejection Ratio	$V_{OUT}=10V, F=120H_Z, C_{ADJ}=10F$	58	65 80		dB

Note1: Unless otherwise noted, these specifications apply: $0℃ \leqq T_J \leqq 70℃$ for the WS317L; $V_{IN}-V_{OUT}=5V$ and $I_{OUT}=40mA$. Although power dissipation is internally limited, these specifications are applicable for power dissipation up to 625mW. I_{MAX} is 100mA

Note2: Regulation is measure at constant junction temperature, using pulse testing with a low duty cycle. Changes in output voltage due to heating effects are covered under the specification for thermal regulation.

Note3: Thermal resistance of the TO-92 package is 180℃/W junction to ambient with 0.4" leads from a PC board and 160 ℃/W junction to ambient with 0.125" length to a PC board

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